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TECHNICAL NOTE

D-1290

AN ADDITION TO THE YALE TABLES FOR THE DEVELOPMENT OF THE DISTURBING FUNCTION

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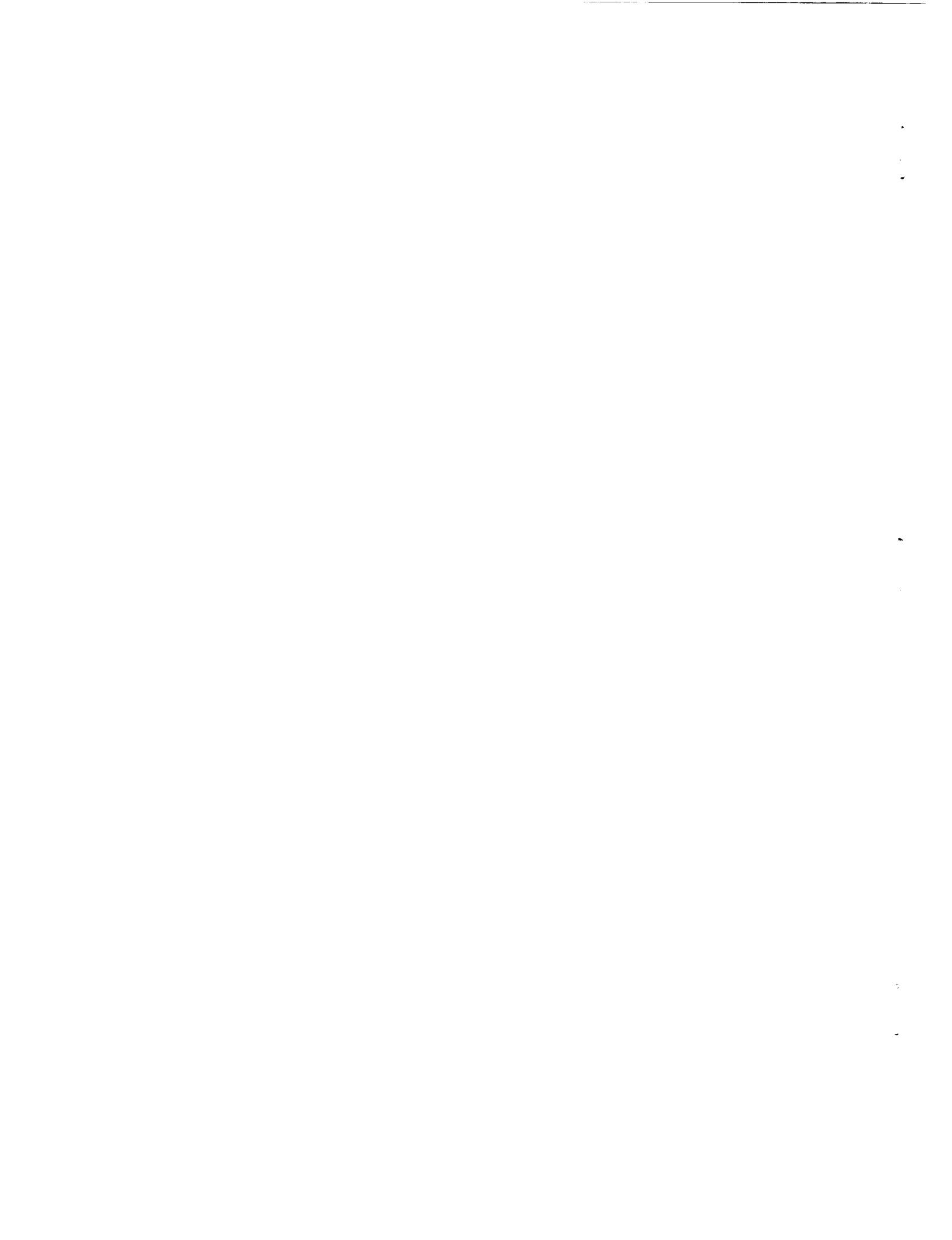


AN ADDITION TO THE YALE TABLES FOR THE DEVELOPMENT OF THE DISTURBING FUNCTION

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Lloyd Carpenter
Goddard Space Flight Center

SUMMARY

The tables for the development of the disturbing function, published by Brown and Brouwer in 1933, are extended for use in investigating sharp commensurabilities and in computing long period effects in the motions of minor planets with large orbital semi-major axes. The logarithms of the coefficients of $\cos i S$ in the expansions of Δ^{-1} and Δ^{-3} are tabulated for $i = 12$ through 24.



CONTENTS

Summary	i
INTRODUCTION	1
DERIVATION OF TABLES	1
CONCLUSIONS	4
ACKNOWLEDGMENT	5
References	5
Appendix A — Values of $\log G_s^{(i)}$ and their Second Differences for $i = 12$ through 24	7
Appendix B — Differences between Values of $\log G_s^{(i)}$ Tab- ulated by Brown and Brouwer and the Values Computed for Comparison	43

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INTRODUCTION

Despite well developed techniques for the numerical integration of perturbations, the development of perturbations into series (general perturbations) is still of great interest and importance for the study of celestial bodies with peculiar orbital elements. In addition, stability problems preferably should be solved in an analytical way. This report is an initial step in the analytical development of perturbations of some planets with peculiar elements.

For investigations of sharp commensurabilities such as those of Orlov (Reference 1) and long period effects in the motions of minor planets, it is desirable to have an extension of the tables for the development of the disturbing function which were published by Brown and Brouwer (Reference 2). These tables give the logarithms of the coefficients of $\cos iS$ in the expansions of Δ^{-1} , Δ^{-3} , Δ^{-5} , and Δ^{-7} for $i = 0$ through 11 and $p = 0$ through 2.5 with p in steps of .01. For first order general perturbations of celestial bodies with large orbital semi-major axes, the coefficients in the expansions of Δ^{-1} and Δ^{-3} are needed for larger values of the index, i , than are given in the existing tables. The logarithms of these coefficients, together with their second differences, are tabulated here for $i = 12$ through 24 and $p = 0$ through 2.5. The coefficients presented here were computed by the method given by Brown and Brouwer in 1933 (Reference 2). However, some of the equations were taken from Brown's earlier article (Reference 3).

DERIVATION OF TABLES

The basic equation to be solved for $G_s^{(i)}$ is

$$(1 - 2\alpha \cos S + \alpha^2)^{-s} = (1 - \alpha^2)^{-s} \left(\frac{1}{2} G_s^{(0)} + \sum G_s^{(i)} \alpha^i \cos iS \right), \quad (1)$$

where

$$G_s^{(i)} = C_s^{(i)} g_s^{(i)}, \quad (2)$$

$$C_s^{(0)} = 2,$$

$$C_s^{(i)} = 2 \frac{s(s+1)\cdots(s+i-1)}{i!} \quad (3)$$

$$g_s^{(i)} = 1 - \frac{s}{1} + \frac{1-s}{i+1} p + \frac{s(s+1)}{1+2} + \frac{(1-s)(2-s)}{(i+1)(i+2)} p^2 + \dots, \quad (4)$$

$$p = \frac{\alpha^2}{1-\alpha^2}, \quad (5)$$

The series (Equation 4) for $\underline{g}_1^{(24)}$ and the corresponding series for $\frac{dg}{dp}$ were evaluated by summing the first three terms and then applying a form of the Euler summability process to the next twenty-two terms. Taking N differences in the Euler transformation,

$$\sum_{k=m}^{\infty} (-1)^k f_k \approx \frac{1}{2} (-1)^m \left[f_m - \frac{1}{2} \Delta f_m + \frac{1}{4} \Delta^2 f_m + \dots + (-1)^N 2^{-N} \Delta^N f_m \right], \quad (6)$$

is equivalent to writing

$$\sum_{k=m}^{\infty} (-1)^k f_k \approx \sum_{k=m}^{m+N} (-1)^k A_k f_k, \quad (7)$$

where

$$A_k = \sum_{j=k-m}^N \frac{1}{2^{j+1}} \binom{j}{k-m}. \quad (8)$$

Thus the coefficients in terms 4 thru 25 of the series (Equation 4) were multiplied by the coefficients A_k determined from Equation 8 with $m = 4$ and $N = 21$. An accuracy

test was made by evaluating the corresponding series for $\frac{d}{dp} \left(g_{\frac{1}{2}}^{(24)} \right)$, $\frac{d^2}{dp^2} \left(g_{\frac{1}{2}}^{(24)} \right)$ and $\int_0^p \left(g_{\frac{1}{2}}^{(24)} \right) dp$, for $p = 0.5, 1.0, \dots, 2.5$. The left hand sides of the test equations

$$(p + p^2) \frac{d^2}{dp^2} \left(g_s^{(i)} \right) + (2p + 1 + i) \frac{d}{dp} \left(g_s^{(i)} \right) + \frac{1}{4} g_s^{(i)} = 0 \quad (9)$$

and

$$(p + p^2) \frac{d}{dp} \left(g_s^{(i)} \right) + i (g_s^{(i)} - 1) + \frac{1}{4} \int_0^p g_s^{(i)} dp = 0 \quad (10)$$

were evaluated and found to be less than 10^{-10} in all cases.

After $g_{\frac{1}{2}}^{(24)}$ and $\frac{d}{dp} \left(g_{\frac{1}{2}}^{(24)} \right)$ were evaluated from Equation 4, $g_{\frac{1}{2}}^{(23)}$ was computed from the equation

$$g_s^{(i-1)} = g_s^{(i)} + \frac{p}{i} \frac{d}{dp} \left(g_s^{(i)} \right) . \quad (11)$$

The values of $g_{\frac{1}{2}}^{(i)}$ for $i = 22, 21, \dots, 0$ were computed from the recurrence relation

$$g_s^{(i)} = g_s^{(i+1)} + \frac{p}{1+p} \left[g_s^{(i+1)} - g_s^{(i+2)} + \frac{s(s-1)}{(i+1)(i+2)} g_s^{(i+2)} \right] . \quad (12)$$

As a check, the values for $i = 0, 1, \dots, 11$ were computed for comparison with the tables of Brown and Brouwer.

After the coefficients were evaluated for $s = \frac{1}{2}$, the recurrence relation

$$g_{s+1}^{(i)} = g_s^{(i)} + 2pH_s^{(i)} , \quad (13)$$

where

$$H_s^{(i)} = g_s^{(i)} - g_s^{(i+1)} + \frac{s}{i+1} g_s^{(i+1)} , \quad (14)$$

was used to compute $g_{\frac{3}{2}}^{(1)}$ for $i = 0, 1, \dots, 23$. The relation

$$g_{s+1}^{(i+1)} = \frac{i + 1}{i + s + 1} (g_{s+1}^{(i)} + H_s^{(i)}) \quad (15)$$

was used to compute $g_{\frac{3}{2}}^{(24)}$.

CONCLUSIONS

The values of $\log G_s^{(i)}$ and the second differences for $i = 12$ through 24 are given in Appendix A. The differences between the values of $\log G_s^{(i)}$ given by Brown and Brouwer and the values computed here are given in Appendix B. The differences are sufficiently small to be of no consequence, yet they are somewhat larger than would be expected from Reference 2 - especially for p between 1.5 and 2. Consequently, some further checks were made. First, the method of analytic continuation given by Brown (Reference 3) was applied for values of p greater than one. The test equations yield errors less than 10^{-12} when this method is used. The results agree with those obtained above by the author.

The second test was a numerical evaluation of the integral

$$G_s^{(i)} = \frac{2}{\pi} \left[\frac{(1 - \alpha^2)^{\frac{s}{2}}}{\alpha^i} \right] \int_0^\pi (1 - 2\alpha \cos S + \alpha^2)^{-\frac{s}{2}} \cos iS dS. \quad (16)$$

This test was made for $p = 1.5, 1.55, 1.6, \dots, 2.0$. Again the results agree with those obtained herein. The results given in Appendix A are accurate except for possible round-off error of one unit in the eighth place.

For purposes of machine - rather than hand - computation of general perturbations, it is planned that these coefficients will be computed as needed in the program.

ACKNOWLEDGMENT

The author wishes to express his gratitude to Dr. Peter Musen, Goddard Space Flight Center, for suggesting the work on general perturbations.

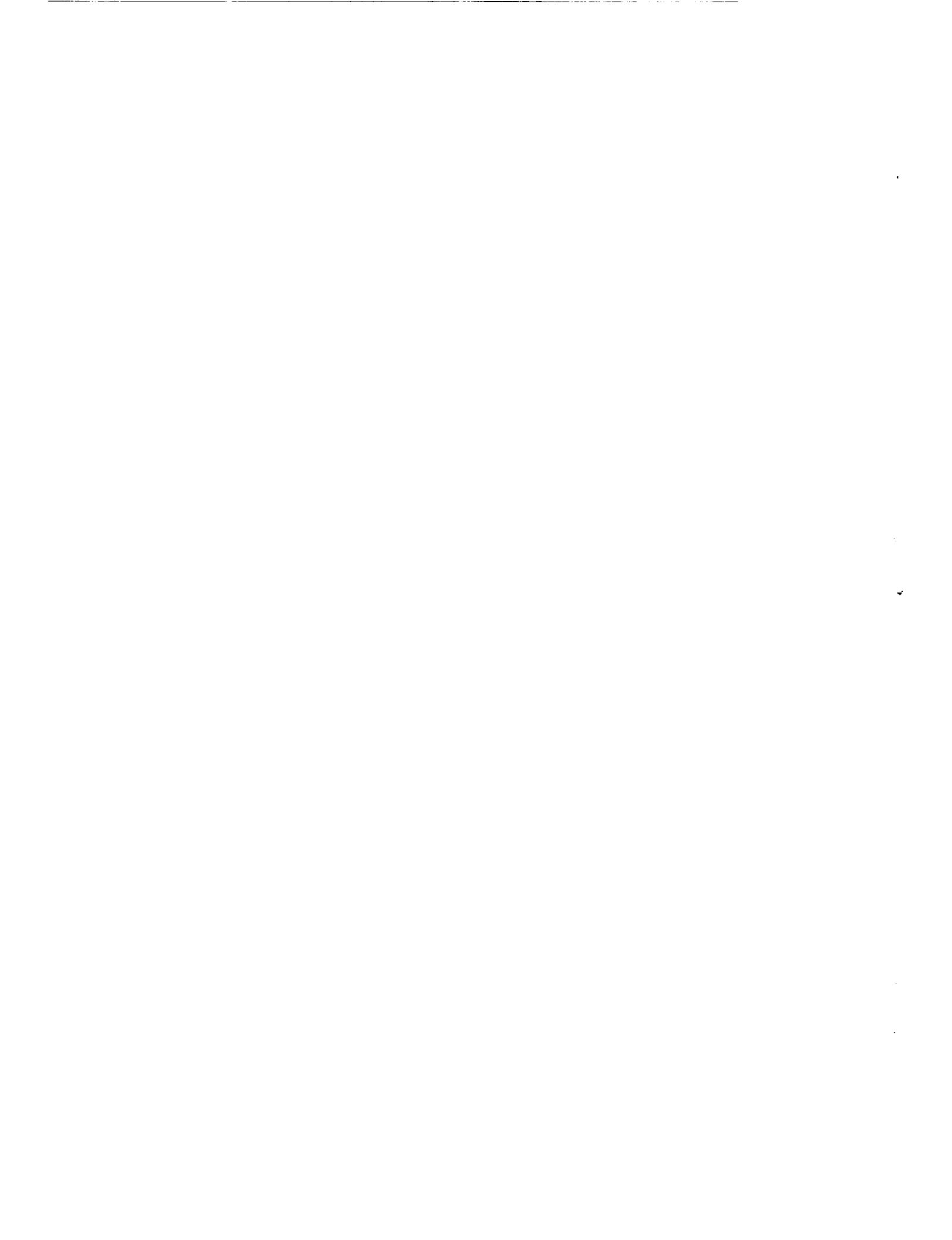
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APPENDIX A

**Values of $\log G_i^{(1)}$ and their Second Differences
for $i = 12$ through 15**



LOG (G) FOR S=0.5

G-214

P	I=12	I=13	I=14	I=15
0.	-.49165816 0	-.50869150 0	-.52448576 0	-.53920902 0
0.01	-.49174162 12	-.50876900 10	-.52455810 9	-.53927684 8
0.02	-.49182496 12	-.50884640 10	-.52463035 9	-.53934458 8
0.03	-.49190818 11	-.50892370 11	-.52470251 9	-.53941224 8
0.04	-.49199129 12	-.50900089 9	-.52477458 9	-.53947982 7
0.05	-.49207428 11	-.50907799 11	-.52484656 8	-.53954733 8
0.06	-.49215716 12	-.50915498 9	-.52491846 10	-.53961476 8
0.07	-.49223992 12	-.50923188 11	-.52499026 8	-.53968211 8
0.08	-.49232256 11	-.50930867 9	-.52506198 9	-.53974938 8
0.09	-.49240509 11	-.50938537 11	-.52513361 8	-.53981657 7
0.10	-.49248751 11	-.50946196 9	-.52520516 10	-.53988369 8
0.11	-.49256982 12	-.50953846 10	-.52527661 7	-.53995073 7
0.12	-.49265201 12	-.50961486 10	-.52534799 10	-.54001770 8
0.13	-.49273408 10	-.50969116 9	-.52541927 8	-.54008459 8
0.14	-.49281605 12	-.50976737 11	-.52549047 8	-.54015140 7
0.15	-.49289790 10	-.50984347 9	-.52556159 9	-.54021814 8
0.16	-.49297965 12	-.50991948 9	-.52563262 9	-.54028480 7
0.17	-.49306128 11	-.50999540 10	-.52570356 8	-.54035139 8
0.18	-.49314280 11	-.51007122 10	-.52577442 8	-.54041790 7
0.19	-.49322421 10	-.51014694 10	-.52584520 9	-.54048434 8
0.20	-.49330552 12	-.51022256 8	-.52591589 8	-.54055070 7
0.21	-.49338671 11	-.51029810 11	-.52598650 9	-.54061699 7
0.22	-.49346779 10	-.51037353 9	-.52605702 7	-.54068321 8
0.23	-.49354877 11	-.51044887 9	-.52612747 9	-.54074935 7
0.24	-.49362964 11	-.51052412 9	-.52619783 9	-.54081542 8
0.25	-.49371040 11	-.51059928 10	-.52626810 7	-.54088141 6
0.26	-.49379105 10	-.51067434 9	-.52633830 9	-.54094734 8
0.27	-.49387160 11	-.51074931 10	-.52640841 8	-.54101319 7
0.28	-.49395204 10	-.51082418 9	-.52647844 8	-.54107897 8
0.29	-.49403238 11	-.51089896 9	-.52654839 8	-.54114467 7
0.30	-.49411261 11	-.51097365 9	-.52661826 8	-.54121030 6
0.31	-.49419273 10	-.51104825 9	-.52668805 8	-.54127587 8
0.32	-.49427275 10	-.51112276 9	-.52675776 8	-.54134136 7
0.33	-.49435267 11	-.51119718 10	-.52682739 9	-.54140678 8
0.34	-.49443248 10	-.51127150 8	-.52689693 7	-.54147212 6
0.35	-.49451219 11	-.51134574 10	-.52696640 8	-.54153740 7
0.36	-.49459179 9	-.51141988 8	-.52703579 8	-.54160261 8
0.37	-.49467130 11	-.51149394 10	-.52710510 8	-.54166774 6
0.38	-.49475070 11	-.51156790 8	-.52717433 8	-.54173281 8
0.39	-.49482999 9	-.51164178 9	-.52724348 8	-.54179780 6
0.40	-.49490919 10	-.51171557 9	-.52731255 7	-.54186273 7
0.41	-.49498829 11	-.51178927 9	-.52738155 9	-.54192759 8
0.42	-.49506728 10	-.51186288 9	-.52745046 7	-.54199237 6
0.43	-.49514617 9	-.51193640 8	-.52751930 8	-.54205709 7
0.44	-.49522497 11	-.51200984 10	-.52758806 7	-.54212174 7
0.45	-.49530366 9	-.51208318 8	-.52765675 9	-.54218632 7
0.46	-.49538226 11	-.51215644 8	-.52772535 6	-.54225083 6
0.47	-.49546075 9	-.51222962 10	-.52779389 9	-.54231528 8
0.48	-.49553915 10	-.51230270 8	-.52786234 7	-.54237965 6
0.49	-.49561745 10	-.51237570 8	-.52793072 8	-.54244396 7
0.50	-.49569565 10	-.51244862 9	-.52799902 8	-.54250820 7

LOG (G) FOR S=0.5

P	I=12	I=13	I=14	I=15	G-214
0.50	-.49569565 10	-.51244862 9	-.52799902 8	-.54250820 7	
0.51	-.49577375 9	-.51252145 9	-.52806724 6	-.54257237 6	
0.52	-.49585176 11	-.51259419 8	-.52813540 9	-.54263648 7	
0.53	-.49592966 9	-.51266685 9	-.52820347 7	-.54270052 7	
0.54	-.49600747 9	-.51273942 8	-.52827147 7	-.54276449 7	
0.55	-.49608519 10	-.51281191 8	-.52833940 8	-.54282839 6	
0.56	-.49616281 10	-.51288432 9	-.52840725 8	-.54289223 7	
0.57	-.49624033 9	-.51295664 8	-.52847502 6	-.54295600 6	
0.58	-.49631776 10	-.51302888 9	-.52854273 9	-.54301971 7	
0.59	-.49639509 9	-.51310103 8	-.52861035 6	-.54308335 6	
0.60	-.49647233 9	-.51317310 8	-.52867791 8	-.54314693 8	
0.61	-.49654948 10	-.51324509 9	-.52874539 7	-.54321043 5	
0.62	-.49662653 10	-.51331699 7	-.52881280 8	-.54327388 7	
0.63	-.49670348 9	-.51338882 9	-.52888013 6	-.54333726 7	
0.64	-.49678034 9	-.51346056 8	-.52894740 8	-.54340057 6	
0.65	-.49685711 9	-.51353222 9	-.52901459 8	-.54346382 7	
0.66	-.49693379 9	-.51360379 7	-.52908170 6	-.54352700 6	
0.67	-.49701038 10	-.51367529 9	-.52914875 8	-.54359012 6	
0.68	-.49708687 9	-.51374670 7	-.52921572 6	-.54365318 7	
0.69	-.49716327 9	-.51381804 9	-.52928263 8	-.54371617 6	
0.70	-.49723958 10	-.51388929 8	-.52934946 7	-.54377910 7	
0.71	-.49731579 8	-.51396046 7	-.52941622 8	-.54384196 6	
0.72	-.49739192 9	-.51403156 9	-.52948290 6	-.54390476 6	
0.73	-.49746796 10	-.51410257 8	-.52954952 7	-.54396750 6	
0.74	-.49754390 8	-.51417350 7	-.52961607 8	-.54403018 7	
0.75	-.49761976 10	-.51424436 9	-.52968254 6	-.54409279 6	
0.76	-.49769552 8	-.51431513 7	-.52974895 7	-.54415534 7	
0.77	-.49777120 9	-.51438583 8	-.52981529 8	-.54421782 5	
0.78	-.49784679 9	-.51445645 8	-.52988155 6	-.54428025 7	
0.79	-.49792229 9	-.51452699 8	-.52994775 7	-.54434261 6	
0.80	-.49799770 9	-.51459745 8	-.53001388 7	-.54440491 6	
0.81	-.49807302 9	-.51466783 7	-.53007994 7	-.54446715 7	
0.82	-.49814825 8	-.51473814 8	-.53014593 7	-.54452932 5	
0.83	-.49822340 10	-.51480837 8	-.53021185 7	-.54459144 7	
0.84	-.49829845 8	-.51487852 8	-.53027770 7	-.54465349 6	
0.85	-.49837342 8	-.51494859 7	-.53034348 6	-.54471548 6	
0.86	-.49844831 9	-.51501859 8	-.53040920 7	-.54477741 6	
0.87	-.49852311 9	-.51508851 7	-.53047485 7	-.54483928 6	
0.88	-.49859782 9	-.51515836 8	-.53054043 7	-.54490109 6	
0.89	-.49867244 8	-.51522813 8	-.53060594 7	-.54496284 6	
0.90	-.49874698 8	-.51529782 7	-.53067138 6	-.54502453 6	
0.91	-.49882144 10	-.51536744 8	-.53073676 7	-.54508616 6	
0.92	-.49889580 7	-.51543698 7	-.53080207 6	-.54514773 6	
0.93	-.49897009 9	-.51550645 8	-.53086732 8	-.54520924 6	
0.94	-.49904429 9	-.51557584 7	-.53093249 6	-.54527069 7	
0.95	-.49911840 8	-.51564516 8	-.53099760 6	-.54533207 5	
0.96	-.49919243 8	-.51571440 7	-.53106265 7	-.54539340 5	
0.97	-.49926638 9	-.51578357 7	-.53112763 7	-.54545468 7	
0.98	-.49934024 8	-.51585267 8	-.53119254 6	-.54551589 6	
0.99	-.49941402 9	-.51592169 7	-.53125739 7	-.54557704 6	
1.00	-.49948771 7	-.51599064 8	-.53132217 7	-.54563813 5	

G-214

LOG (G) FOR S=0.5

P	I=12		I=13		I=14		I=15	
1.00	-.49948771	7	-.51599064	8	-.53132217	7	-.54563813	5
1.01	-.49956133	9	-.51605951	6	-.53138688	5	-.54569917	6
1.02	-.49963486	9	-.51612832	8	-.53145154	8	-.54576015	6
1.03	-.49970830	7	-.51619705	8	-.53151612	6	-.54582107	6
1.04	-.49978167	9	-.51626570	6	-.53158064	6	-.54588193	6
1.05	-.49985495	7	-.51633429	8	-.53164510	7	-.54594273	5
1.06	-.49992816	9	-.51640280	7	-.53170949	6	-.54600348	7
1.07	-.50000128	8	-.51647124	8	-.53177382	7	-.54606416	5
1.08	-.50007432	8	-.51653960	6	-.53183808	6	-.54612479	5
1.09	-.50014728	9	-.51660790	7	-.53190228	6	-.54618537	7
1.10	-.50022015	7	-.51667613	8	-.53196642	7	-.54624588	5
1.11	-.50029295	8	-.51674428	7	-.53203049	6	-.54630634	6
1.12	-.50036567	8	-.51681236	7	-.53209450	6	-.54636674	5
1.13	-.50043831	9	-.51688037	7	-.53215845	7	-.54642709	7
1.14	-.50051086	7	-.51694831	7	-.53222233	6	-.54648737	4
1.15	-.50058334	8	-.51701618	7	-.53228615	6	-.54654761	7
1.16	-.50065574	8	-.51708398	6	-.53234991	6	-.54660778	5
1.17	-.50072806	8	-.51715172	8	-.53241361	7	-.54666790	6
1.18	-.50080030	7	-.51721938	7	-.53247724	6	-.54672796	5
1.19	-.50087247	9	-.51728697	7	-.53254081	6	-.54678797	6
1.20	-.50094455	7	-.51735449	7	-.53260432	6	-.54684792	5
1.21	-.50101656	8	-.51742194	7	-.53266777	7	-.54690782	6
1.22	-.50108849	8	-.51748932	6	-.53273115	6	-.54696766	6
1.23	-.50116034	8	-.51755664	8	-.53279447	5	-.54702744	5
1.24	-.50123211	7	-.51762388	6	-.53285774	7	-.54708717	5
1.25	-.50130381	8	-.51769106	7	-.53292094	6	-.54714685	6
1.26	-.50137543	8	-.51775817	7	-.53298408	6	-.54720647	6
1.27	-.50144697	7	-.51782521	7	-.53304716	6	-.54726603	5
1.28	-.50151844	8	-.51789218	6	-.53311018	7	-.54732554	5
1.29	-.50158983	8	-.51795909	7	-.53317313	5	-.54738500	6
1.30	-.50166114	7	-.51802593	7	-.53323603	6	-.54744440	5
1.31	-.50173238	8	-.51809270	7	-.53329887	6	-.54750375	6
1.32	-.50180354	7	-.51815940	6	-.53336165	7	-.54756304	5
1.33	-.50187463	8	-.51822604	7	-.53342436	5	-.54762228	5
1.34	-.50194564	7	-.51829261	7	-.53348702	6	-.54768147	6
1.35	-.50201658	8	-.51835911	7	-.53354962	6	-.54774060	5
1.36	-.50208744	7	-.51842554	6	-.53361216	6	-.54779968	5
1.37	-.50215823	8	-.51849191	6	-.53367464	6	-.54785871	6
1.38	-.50222894	7	-.51855822	7	-.53373706	6	-.54791768	5
1.39	-.50229958	7	-.51862446	7	-.53379942	6	-.54797660	6
1.40	-.50237015	8	-.51869063	6	-.53386172	6	-.54803546	5
1.41	-.50244064	7	-.51875674	7	-.53392396	5	-.54809427	4
1.42	-.50251106	8	-.51882278	7	-.53398615	6	-.54815304	7
1.43	-.50258140	7	-.51888875	6	-.53404828	7	-.54821174	4
1.44	-.50265167	7	-.51895466	6	-.53411034	5	-.54827040	6
1.45	-.50272187	7	-.51902051	7	-.53417235	5	-.54832900	5
1.46	-.50279200	8	-.51908629	6	-.53423431	7	-.54838755	5
1.47	-.50286205	7	-.51915201	7	-.53429620	5	-.54844605	5
1.48	-.50293203	7	-.51921766	6	-.53435804	6	-.54850450	6
1.49	-.50300194	7	-.51928325	6	-.53441982	6	-.54856289	5
1.50	-.50307178	7	-.51934878	7	-.53448154	6	-.54862123	5

LOG (G) FOR S=0.5

P	I=12	I=13	I=14	I=15	G-214			
1.50	-.50307178	7	-.51934878	7	-.53448154	6	-.54862123	5
1.51	-.50314155	8	-.51941424	7	-.53454320	5	-.54867952	5
1.52	-.50321124	7	-.51947963	5	-.53460481	6	-.54873776	5
1.53	-.50328086	6	-.51954497	7	-.53466636	5	-.54879595	5
1.54	-.50335042	8	-.51961024	7	-.53472786	7	-.54885409	5
1.55	-.50341990	7	-.51967544	5	-.53478929	5	-.54891218	6
1.56	-.50348931	7	-.51974059	7	-.53485067	5	-.54897021	4
1.57	-.50355865	7	-.51980567	6	-.53491200	6	-.54902820	6
1.58	-.50362792	8	-.51987069	6	-.53497327	6	-.54908613	5
1.59	-.50369711	6	-.51993565	7	-.53503448	5	-.54914401	5
1.60	-.50376624	7	-.52000054	6	-.53509564	6	-.54920184	4
1.61	-.50383530	7	-.52006537	6	-.53515674	6	-.54925963	6
1.62	-.50390429	7	-.52013014	6	-.53521778	5	-.54931736	5
1.63	-.50397321	6	-.52019485	7	-.53527877	6	-.54937504	5
1.64	-.50404207	8	-.52025949	5	-.53533970	5	-.54943267	5
1.65	-.50411085	7	-.52032408	7	-.53540058	5	-.54949025	5
1.66	-.50417956	6	-.52038860	6	-.53546141	7	-.54954778	4
1.67	-.50424821	8	-.52045306	6	-.53552217	4	-.54960527	6
1.68	-.50431678	6	-.52051746	6	-.53558289	6	-.54966270	5
1.69	-.50438529	7	-.52058180	6	-.53564355	6	-.54972008	4
1.70	-.50445373	7	-.52064608	6	-.53570415	5	-.54977742	6
1.71	-.50452210	6	-.52071030	6	-.53576470	6	-.54983470	4
1.72	-.50459041	7	-.52077446	6	-.53582519	4	-.54989194	6
1.73	-.50465865	8	-.52083856	7	-.53588564	7	-.54994912	4
1.74	-.50472681	5	-.52090259	5	-.53594602	4	-.55000626	5
1.75	-.50479492	8	-.52096657	6	-.53600636	6	-.55006335	5
1.76	-.50486295	6	-.52103049	6	-.53606664	6	-.55012039	5
1.77	-.50493092	7	-.52109435	7	-.53612686	5	-.55017738	5
1.78	-.50499882	6	-.52115814	5	-.53618703	5	-.55023432	4
1.79	-.50506666	7	-.52122188	6	-.53624715	5	-.55029122	5
1.80	-.50513443	7	-.52128556	6	-.53630722	6	-.55034807	6
1.81	-.50520213	6	-.52134918	6	-.53636723	5	-.55040486	3
1.82	-.50526977	7	-.52141274	5	-.53642719	6	-.55046162	6
1.83	-.50533734	7	-.52147625	7	-.53648709	4	-.55051832	5
1.84	-.50540484	6	-.52153969	5	-.53654695	6	-.55057497	4
1.85	-.50547228	7	-.52160308	7	-.53660675	5	-.55063158	5
1.86	-.50553965	6	-.52166640	5	-.53666650	6	-.55068814	5
1.87	-.50560696	6	-.52172967	6	-.53672619	4	-.55074465	4
1.88	-.50567421	7	-.52179288	5	-.53678584	6	-.55080112	5
1.89	-.50574139	7	-.52185604	7	-.53684543	5	-.55085754	5
1.90	-.50580850	6	-.52191913	5	-.53690497	6	-.55091391	5
1.91	-.50587555	6	-.52198217	6	-.53696445	4	-.55097023	4
1.92	-.50594254	7	-.52204515	6	-.53702389	6	-.55102651	5
1.93	-.50600946	6	-.52210807	6	-.53708327	5	-.55108274	5
1.94	-.50607632	7	-.52217093	5	-.53714260	4	-.55113892	4
1.95	-.50614311	6	-.52223374	6	-.53720189	7	-.55119506	5
1.96	-.50620984	6	-.52229649	5	-.53726111	4	-.55125115	5
1.97	-.50627651	7	-.52235919	7	-.53732029	5	-.55130719	4
1.98	-.50634311	6	-.52242182	5	-.53737942	5	-.55136319	5
1.99	-.50640965	6	-.52248440	5	-.53743850	6	-.55141914	5
2.00	-.50647613	7	-.52254693	7	-.53749752	4	-.55147504	4

LOG (G) FOR S=0.5

P	I=12	I=13	I=14	I=15				
G-214								
2.00	-.50647613	7	-.52254693	7	-.53749752	4	-.55147504	4
2.01	-.50654254	6	-.52260939	4	-.53755650	6	-.55153090	4
2.02	-.50660889	6	-.52267181	7	-.53761542	5	-.55158672	6
2.03	-.50667518	6	-.52273416	5	-.53767429	4	-.55164248	3
2.04	-.50674141	7	-.52279646	6	-.53773312	6	-.55169821	6
2.05	-.50680757	6	-.52285870	5	-.53779189	5	-.55175388	4
2.06	-.50687367	6	-.52292089	5	-.53785061	5	-.55180951	4
2.07	-.50693971	6	-.52298303	7	-.53790928	4	-.55186510	5
2.08	-.50700569	6	-.52304510	5	-.53796791	6	-.55192064	5
2.09	-.50707161	7	-.52310712	5	-.53802648	5	-.55197613	4
2.10	-.50713746	5	-.52316909	6	-.53808500	5	-.55203158	4
2.11	-.50720326	7	-.52323100	5	-.53814347	4	-.55208699	5
2.12	-.50726899	6	-.52329286	6	-.53820190	6	-.55214235	5
2.13	-.50733466	6	-.52335466	5	-.53826027	4	-.55219766	4
2.14	-.50740027	6	-.52341641	6	-.53831860	6	-.55225293	4
2.15	-.50746582	6	-.52347810	5	-.53837687	4	-.55230816	5
2.16	-.50753131	6	-.52353974	5	-.53843510	5	-.55236334	4
2.17	-.50759674	6	-.52360133	6	-.53849328	5	-.55241848	5
2.18	-.50766211	7	-.52366286	6	-.53855141	5	-.55247357	4
2.19	-.50772741	5	-.52372433	5	-.53860949	5	-.55252862	5
2.20	-.50779266	6	-.52378575	5	-.53866752	5	-.55258362	4
2.21	-.50785785	6	-.52384712	5	-.53872550	4	-.55263858	4
2.22	-.50792298	6	-.52390844	6	-.53878344	6	-.55269350	5
2.23	-.50798805	6	-.52396970	5	-.53884132	4	-.55274837	4
2.24	-.50805306	6	-.52403091	6	-.53889916	5	-.55280320	5
2.25	-.50811801	6	-.52409206	4	-.53895695	5	-.55285798	4
2.26	-.50818290	6	-.52415317	7	-.53901469	4	-.55291272	4
2.27	-.50824773	6	-.52421421	4	-.53907239	6	-.55296742	4
2.28	-.50831250	5	-.52427521	6	-.53913003	4	-.55302208	5
2.29	-.50837722	7	-.52433615	5	-.53918763	4	-.55307669	4
2.30	-.50844187	5	-.52439704	5	-.53924519	6	-.55313126	5
2.31	-.50850647	6	-.52445788	5	-.53930269	4	-.55318578	4
2.32	-.50857101	6	-.52451867	6	-.53936015	6	-.55324026	4
2.33	-.50863549	6	-.52457940	5	-.53941755	3	-.55329470	4
2.34	-.50869991	5	-.52464008	5	-.53947492	6	-.55334910	5
2.35	-.50876428	7	-.52470071	5	-.53953223	4	-.55340345	4
2.36	-.50882858	5	-.52476129	6	-.53958950	5	-.55345776	4
2.37	-.50889283	6	-.52482181	4	-.53964672	4	-.55351203	4
2.38	-.50895702	5	-.52488229	6	-.53970390	6	-.55356626	5
2.39	-.50902116	7	-.52494271	5	-.53976102	3	-.55362044	4
2.40	-.50908523	5	-.52500308	5	-.53981811	6	-.55367458	4
2.41	-.50914925	5	-.52506340	5	-.53987514	4	-.55372868	4
2.42	-.50921322	7	-.52512367	6	-.53993213	5	-.55378274	5
2.43	-.50927712	5	-.52518388	4	-.53998907	4	-.55383675	4
2.44	-.50934097	6	-.52524405	5	-.54004597	5	-.55389072	4
2.45	-.50940476	5	-.52530417	6	-.54010282	5	-.55394465	4
2.46	-.50946850	6	-.52536423	5	-.54015962	4	-.55399854	4
2.47	-.50953218	6	-.52542424	4	-.54021638	5	-.55405239	4
2.48	-.50959580	5	-.52548421	6	-.54027309	4	-.55410620	5
2.49	-.50965937	6	-.52554412	5	-.54032976	5	-.55415996	4
2.50	-.50972288	0	-.52560398	0	-.54038638	0	-.55421368	0

LOG (G) FOR S=0.5

P	I=16	I=17	I=18	I=19	
0.	-.55299731	0	-.56596228	0	-.57819674
0.01	-.55306114	7	-.56602257	7	-.57825386
0.02	-.55312490	7	-.56608279	5	-.57831091
0.03	-.55318859	7	-.56614296	7	-.57836792
0.04	-.55325221	7	-.56620306	7	-.57842486
0.05	-.55331576	6	-.56626309	5	-.57848175
0.06	-.55337925	8	-.56632307	7	-.57853859
0.07	-.55344266	6	-.56638298	6	-.57859537
0.08	-.55350601	8	-.56644283	6	-.57865209
0.09	-.55356928	6	-.56650262	6	-.57870876
0.10	-.55363249	7	-.56656235	6	-.57876537
0.11	-.55369563	7	-.56662202	7	-.57882193
0.12	-.55375870	6	-.56668162	5	-.57887843
0.13	-.55382171	8	-.56674117	7	-.57893488
0.14	-.55388464	6	-.56680065	5	-.57899127
0.15	-.55394751	7	-.56686008	7	-.57904761
0.16	-.55401031	6	-.56691944	5	-.57910389
0.17	-.55407305	7	-.56697875	7	-.57916012
0.18	-.55413572	7	-.56703799	6	-.57921629
0.19	-.55419832	7	-.56709717	5	-.57927242
0.20	-.55426085	6	-.56715630	6	-.57932848
0.21	-.55432332	7	-.56721537	7	-.57938450
0.22	-.55438572	6	-.56727437	5	-.57944046
0.23	-.55444806	7	-.56733332	6	-.57949637
0.24	-.55451033	6	-.56739221	6	-.57955222
0.25	-.55457254	7	-.56745104	6	-.57960802
0.26	-.55463468	6	-.56750981	6	-.57966377
0.27	-.55469676	7	-.56756852	5	-.57971947
0.28	-.55475877	6	-.56762718	7	-.57977511
0.29	-.55482072	7	-.56768577	5	-.57983070
0.30	-.55488260	6	-.56774431	5	-.57988624
0.31	-.55494442	6	-.56780280	7	-.57994173
0.32	-.55500618	7	-.56786122	5	-.57999716
0.33	-.55506787	6	-.56791959	6	-.58005254
0.34	-.55512950	7	-.56797790	6	-.58010787
0.35	-.55519106	6	-.56803615	6	-.58016315
0.36	-.55525256	6	-.56809434	5	-.58021838
0.37	-.55531400	6	-.56815248	5	-.58027356
0.38	-.55537538	7	-.56821057	7	-.58032868
0.39	-.55543669	6	-.56826859	5	-.58038376
0.40	-.55549794	6	-.56832656	5	-.58043878
0.41	-.55555913	7	-.56838448	7	-.58049376
0.42	-.55562025	5	-.56844233	4	-.58054868
0.43	-.55568132	7	-.56850014	7	-.58060355
0.44	-.55574232	6	-.56855788	5	-.58065837
0.45	-.55580326	6	-.56861557	5	-.58071314
0.46	-.55586414	6	-.56867321	6	-.58076786
0.47	-.55592496	6	-.56873079	5	-.58082254
0.48	-.55598572	6	-.56878832	6	-.58087716
0.49	-.55604642	7	-.56884579	6	-.58093173
0.50	-.55610705	5	-.56890320	4	-.58098625
					5
					3

G-214

G-214

LOG (G) FOR S=0.5

P	I=16	I=17	I=18	I=19				
0.50	-.55610705	5	-.56890320	4	-.58098625	5	-.59243156	3
0.51	-.55616763	7	-.56896057	7	-.58104072	4	-.59248343	6
0.52	-.55622814	5	-.56901787	4	-.58109515	6	-.59253524	3
0.53	-.55628860	7	-.56907513	6	-.58114952	4	-.59258702	6
0.54	-.55634899	5	-.56913233	6	-.58120385	5	-.59263874	3
0.55	-.55640933	7	-.56918947	5	-.58125813	6	-.59269043	5
0.56	-.55646960	5	-.56924656	5	-.58131235	4	-.59274207	5
0.57	-.55652982	6	-.56930360	5	-.58136653	5	-.59279366	4
0.58	-.55658998	6	-.56936059	6	-.58142066	4	-.59284521	4
0.59	-.55665008	6	-.56941752	6	-.58147475	6	-.59289672	5
0.60	-.55671012	6	-.56947439	4	-.58152878	4	-.59294818	4
0.61	-.55677010	6	-.56953122	6	-.58158277	6	-.59299960	5
0.62	-.55683002	6	-.56958799	5	-.58163670	4	-.59305097	4
0.63	-.55688988	5	-.56964471	5	-.58169059	4	-.59310230	4
0.64	-.55694969	7	-.56970138	6	-.58174444	6	-.59315359	5
0.65	-.55700943	5	-.56975799	5	-.58179823	4	-.59320483	4
0.66	-.55706912	6	-.56981455	5	-.58185198	5	-.59325603	4
0.67	-.55712875	5	-.56987106	5	-.58190568	5	-.59330719	4
0.68	-.55718833	7	-.56992752	6	-.58195933	4	-.59335831	5
0.69	-.55724784	5	-.56998392	4	-.58201294	6	-.59340938	4
0.70	-.55730730	6	-.57004028	6	-.58206649	4	-.59346041	5
0.71	-.55736670	6	-.57009658	5	-.58212000	4	-.59351139	4
0.72	-.55742604	5	-.57015283	5	-.58217347	5	-.59356233	4
0.73	-.55748533	6	-.57020903	5	-.58222689	5	-.59361323	4
0.74	-.55754456	5	-.57026518	6	-.58228026	5	-.59366409	4
0.75	-.55760374	7	-.57032127	4	-.58233358	4	-.59371491	5
0.76	-.55766285	4	-.57037732	6	-.58238686	5	-.59376568	4
0.77	-.55772192	7	-.57043331	4	-.58244009	4	-.59381641	4
0.78	-.55778092	5	-.57048926	6	-.58249328	5	-.59386710	5
0.79	-.55783987	6	-.57054515	5	-.58254642	5	-.59391774	3
0.80	-.55789876	5	-.57060099	5	-.58259951	4	-.59396835	5
0.81	-.55795760	6	-.57065678	4	-.58265256	5	-.59401891	4
0.82	-.55801638	5	-.57071253	6	-.58270556	4	-.59406943	4
0.83	-.55807511	6	-.57076822	5	-.58275852	5	-.59411991	4
0.84	-.55813378	5	-.57082386	5	-.58281143	4	-.59417035	4
0.85	-.55819240	6	-.57087945	5	-.58286430	5	-.59422075	5
0.86	-.55825096	5	-.57093499	4	-.58291712	5	-.59427110	3
0.87	-.55830947	6	-.57099049	6	-.58296989	3	-.59432142	5
0.88	-.55836792	5	-.57104593	5	-.58302263	6	-.59437169	4
0.89	-.55842632	6	-.57110132	4	-.58307531	4	-.59442192	4
0.90	-.55848466	5	-.57115667	6	-.58312795	4	-.59447211	4
0.91	-.55854295	5	-.57121196	4	-.58318055	5	-.59452226	4
0.92	-.55860119	6	-.57126721	5	-.58323310	4	-.59457237	4
0.93	-.55865937	6	-.57132241	5	-.58328561	5	-.59462244	4
0.94	-.55871749	4	-.57137756	5	-.58333807	4	-.59467247	5
0.95	-.55877557	6	-.57143266	5	-.58339049	5	-.59472245	3
0.96	-.55883359	5	-.57148771	5	-.58344286	4	-.59477240	4
0.97	-.55889156	6	-.57154271	4	-.58349519	4	-.59482231	5
0.98	-.55894947	5	-.57159767	5	-.58354748	5	-.59487217	3
0.99	-.55900733	5	-.57165258	5	-.58359972	4	-.59492200	4
1.00	-.55906514	6	-.57170744	5	-.58365192	4	-.59497179	5

LOG (G) FOR S=0.5

P	I=16	I=17	I=18	I=19	G-214			
1.00	-.55906514	6	-.57170744	5	-.58365192	4	-.59497179	5
1.01	-.55912289	5	-.57176225	5	-.58370408	5	-.59502153	3
1.02	-.55918059	5	-.57181701	4	-.58375619	4	-.59507124	4
1.03	-.55923824	5	-.57187173	6	-.58380826	5	-.59512091	5
1.04	-.55929584	5	-.57192639	4	-.58386028	4	-.59517053	3
1.05	-.55935339	6	-.57198101	4	-.58391226	4	-.59522012	4
1.06	-.55941088	5	-.57203559	6	-.58396420	4	-.59526967	4
1.07	-.55946832	5	-.57209011	5	-.58401610	5	-.59531918	4
1.08	-.55952571	6	-.57214459	5	-.58406795	4	-.59536865	4
1.09	-.55958304	4	-.57219902	4	-.58411976	4	-.59541808	4
1.10	-.55964033	6	-.57225341	5	-.58417153	5	-.59546747	4
1.11	-.55969756	5	-.57230775	5	-.58422325	4	-.59551682	3
1.12	-.55975474	4	-.57236204	4	-.58427493	4	-.59556614	5
1.13	-.55981188	6	-.57241629	6	-.58432657	4	-.59561541	3
1.14	-.55986896	6	-.57247048	3	-.58437817	4	-.59566465	5
1.15	-.55992598	4	-.57252464	6	-.58442973	5	-.59571384	3
1.16	-.55998296	5	-.57257874	4	-.58448124	4	-.59576300	4
1.17	-.56003989	5	-.57263280	4	-.58453271	4	-.59581212	4
1.18	-.56009677	6	-.57268682	5	-.58458414	5	-.59586120	4
1.19	-.56015359	4	-.57274079	5	-.58463552	3	-.59591024	3
1.20	-.56021037	6	-.57279471	4	-.58468687	5	-.59595925	4
1.21	-.56026709	4	-.57284859	5	-.58473817	4	-.59600822	5
1.22	-.56032377	6	-.57290242	5	-.58478943	4	-.59605714	3
1.23	-.56038039	4	-.57295620	4	-.58484065	4	-.59610603	3
1.24	-.56043697	5	-.57300994	4	-.58489183	4	-.59615489	5
1.25	-.56049350	6	-.57306364	5	-.58494297	4	-.59620370	3
1.26	-.56054997	4	-.57311729	4	-.58499407	5	-.59625248	4
1.27	-.56060640	6	-.57317090	5	-.58504512	3	-.59630122	4
1.28	-.56066277	4	-.57322446	5	-.58509614	5	-.59634992	4
1.29	-.56071910	5	-.57327797	4	-.58514711	4	-.59639858	3
1.30	-.56077538	5	-.57333144	4	-.58519804	3	-.59644721	4
1.31	-.56083161	5	-.57338487	5	-.58524894	5	-.59649580	4
1.32	-.56088779	5	-.57343825	4	-.58529979	4	-.59654435	4
1.33	-.56094392	4	-.57349159	5	-.58535060	4	-.59659286	3
1.34	-.56100001	6	-.57354488	4	-.58540137	4	-.59664134	4
1.35	-.56105604	4	-.57359813	5	-.58545210	4	-.59668978	3
1.36	-.56111203	5	-.57365133	4	-.58550279	4	-.59673819	5
1.37	-.56116797	6	-.57370449	4	-.58555344	5	-.59678655	3
1.38	-.56122385	3	-.57375761	5	-.58560404	3	-.59683488	3
1.39	-.56127970	6	-.57381068	4	-.58565461	4	-.59688318	5
1.40	-.56133549	5	-.57386371	4	-.58570514	4	-.59693143	3
1.41	-.56139123	4	-.57391670	5	-.58575563	4	-.59697965	4
1.42	-.56144693	5	-.57396964	4	-.58580608	4	-.59702783	3
1.43	-.56150258	4	-.57402254	4	-.58585649	4	-.59707598	4
1.44	-.56155819	6	-.57407540	5	-.58590686	4	-.59712409	3
1.45	-.56161374	4	-.57412821	4	-.58595719	4	-.59717217	5
1.46	-.56166925	5	-.57418098	5	-.58600748	3	-.59722020	2
1.47	-.56172471	5	-.57423370	3	-.58605774	5	-.59726821	5
1.48	-.56178012	4	-.57428639	5	-.58610795	4	-.59731617	3
1.49	-.56183549	5	-.57433903	4	-.58615812	3	-.59736410	3
1.50	-.56189081	5	-.57439163	5	-.58620826	5	-.59741200	5

LOG (G) FOR S=0.5

P	I=16	I=17	I=18	I=19
G-214				
1.50	- .56189081 5	- .57439163 5	- .58620826 5	- .59741200 5
1.51	- .56194608 4	- .57444418 4	- .58625835 3	- .59745985 2
1.52	- .56200131 5	- .57449669 4	- .58630841 4	- .59750768 5
1.53	- .56205649 5	- .57454916 4	- .58635843 4	- .59755546 3
1.54	- .56211162 4	- .57460159 4	- .58640841 4	- .59760321 3
1.55	- .56216671 5	- .57465398 5	- .58645835 4	- .59765093 4
1.56	- .56222175 5	- .57470632 4	- .58650825 4	- .59769861 3
1.57	- .56227674 4	- .57475862 4	- .58655811 3	- .59774626 5
1.58	- .56233169 5	- .57481088 4	- .58660794 5	- .59779386 2
1.59	- .56238659 4	- .57486310 4	- .58665772 3	- .59784144 4
1.60	- .56244145 5	- .57491528 5	- .58670747 4	- .59788898 4
1.61	- .56249626 5	- .57496741 4	- .58675718 4	- .59793648 3
1.62	- .562555102 4	- .57501950 4	- .58680685 3	- .59798395 4
1.63	- .56260574 4	- .57507155 4	- .58685649 5	- .59803138 3
1.64	- .56266042 5	- .57512356 4	- .58690608 3	- .59807878 3
1.65	- .56271505 5	- .57517553 4	- .58695564 4	- .59812615 4
1.66	- .56276963 4	- .57522746 5	- .58700516 4	- .59817348 4
1.67	- .56282417 5	- .57527934 3	- .58705464 3	- .59822077 3
1.68	- .56287866 4	- .57533119 5	- .58710409 4	- .59826803 3
1.69	- .56293311 5	- .57538299 3	- .58715350 4	- .59831526 4
1.70	- .56298751 4	- .57543476 5	- .58720287 4	- .59836245 3
1.71	- .56304187 4	- .57548648 4	- .58725220 4	- .59840961 4
1.72	- .56309619 5	- .57553816 4	- .58730149 3	- .59845673 3
1.73	- .56315046 5	- .57558980 4	- .58735075 4	- .59850382 4
1.74	- .56320468 4	- .57564140 4	- .58739997 3	- .59855087 3
1.75	- .56325886 4	- .57569296 4	- .58744916 5	- .59859789 3
1.76	- .56331300 5	- .57574448 4	- .58749830 3	- .59864488 4
1.77	- .56336709 4	- .57579596 4	- .58754741 3	- .59869183 3
1.78	- .56342114 4	- .57584740 4	- .58759649 5	- .59873875 4
1.79	- .56347515 5	- .57589880 4	- .58764552 3	- .59878563 3
1.80	- .56352911 4	- .57595016 4	- .58769452 3	- .59883248 3
1.81	- .56358303 5	- .57600148 5	- .58774349 5	- .59887930 4
1.82	- .56363690 4	- .57605275 3	- .58779241 3	- .59892608 3
1.83	- .56369073 4	- .57610399 4	- .58784130 3	- .59897283 3
1.84	- .56374452 5	- .57615519 4	- .58789016 5	- .59901955 4
1.85	- .56379826 4	- .57620635 4	- .58793837 3	- .59906623 3
1.86	- .56385196 4	- .57625747 3	- .58798775 3	- .59911288 3
1.87	- .56390562 5	- .57630856 5	- .58803650 4	- .59915950 4
1.88	- .56395923 4	- .57635960 4	- .58808521 4	- .59920608 3
1.89	- .56401280 4	- .57641060 4	- .58813388 3	- .59925263 4
1.90	- .56406633 4	- .57646156 3	- .58818252 4	- .59929914 2
1.91	- .56411982 5	- .57651249 5	- .58823112 4	- .59934563 4
1.92	- .56417326 4	- .57656337 3	- .58827968 3	- .59939208 4
1.93	- .56422666 4	- .57661422 4	- .58832821 3	- .59943849 2
1.94	- .56428002 5	- .57666503 4	- .58837671 4	- .59948488 4
1.95	- .56433333 3	- .57671580 4	- .58842517 4	- .59953123 3
1.96	- .56438661 5	- .57676653 4	- .58847359 4	- .59957755 3
1.97	- .56443984 4	- .57681722 4	- .58852197 2	- .59962384 4
1.98	- .56449303 5	- .57686787 4	- .58857033 5	- .59967009 3
1.99	- .56454617 3	- .57691848 3	- .58861864 3	- .59971631 3
2.00	- .56459928 5	- .57696906 4	- .58866692 3	- .59976250 3

LOG(G) FOR S=0.5

P	I=16	I=17	I=18	I=19	G-214	
2.00	-.56459928	5	-.57696906	4	-.58866692	3
2.01	-.56465234	4	-.57701960	4	-.58871517	4
2.02	-.56470536	4	-.57707010	4	-.58876338	3
2.03	-.56475834	4	-.57712056	4	-.58881156	4
2.04	-.56481128	5	-.57717098	3	-.58885970	4
2.05	-.56486417	3	-.57722137	5	-.58890780	3
2.06	-.56491703	5	-.57727171	3	-.58895587	3
2.07	-.56496984	4	-.57732202	3	-.58900391	4
2.08	-.56502261	4	-.57737230	5	-.58905191	3
2.09	-.56507534	4	-.57742253	3	-.58909988	4
2.10	-.56512803	4	-.57747273	5	-.58914781	3
2.11	-.56518068	4	-.57752288	2	-.58919571	4
2.12	-.56523329	4	-.57757301	5	-.58924357	3
2.13	-.56528586	5	-.57762309	3	-.58929140	3
2.14	-.56533838	3	-.57767314	4	-.58933920	4
2.15	-.56539087	5	-.57772315	4	-.58938696	4
2.16	-.56544331	3	-.57777312	4	-.58943468	2
2.17	-.56549572	5	-.57782305	3	-.58948238	5
2.18	-.56554808	4	-.57787295	4	-.58953003	2
2.19	-.56560040	3	-.57792281	3	-.58957766	4
2.20	-.56565269	5	-.57797264	4	-.58962525	3
2.21	-.56570493	3	-.57802243	4	-.58967281	4
2.22	-.56575714	5	-.57807218	4	-.58972033	3
2.23	-.56580930	4	-.57812189	3	-.58976782	4
2.24	-.56586142	3	-.57817157	4	-.58981527	2
2.25	-.56591351	5	-.57822121	4	-.58986270	5
2.26	-.56596555	4	-.57827081	3	-.58991008	2
2.27	-.56601755	3	-.57832038	3	-.58995744	4
2.28	-.56606952	5	-.57836992	5	-.59000476	3
2.29	-.56612144	3	-.57841941	3	-.59005205	4
2.30	-.56617333	5	-.57846887	4	-.59009930	2
2.31	-.56622517	3	-.57851829	3	-.59014653	4
2.32	-.56627698	4	-.57856768	4	-.59019372	4
2.33	-.56632875	4	-.57861703	3	-.59024087	3
2.34	-.56638048	4	-.57866635	4	-.59028799	3
2.35	-.56643217	4	-.57871563	3	-.59033508	3
2.36	-.56648382	4	-.57876488	5	-.59038214	4
2.37	-.56653543	4	-.57881408	2	-.59042916	2
2.38	-.56658700	3	-.57886326	4	-.59047616	5
2.39	-.56663854	5	-.57891240	4	-.59052311	2
2.40	-.56669003	3	-.57896150	4	-.59057004	4
2.41	-.56674149	4	-.57901056	2	-.59061693	3
2.42	-.56679291	4	-.57905960	5	-.59066379	3
2.43	-.56684429	4	-.57910859	3	-.59071062	3
2.44	-.56689563	4	-.57915755	3	-.59075742	4
2.45	-.56694693	3	-.57920648	4	-.59080418	3
2.46	-.56699820	4	-.57925537	3	-.59085091	3
2.47	-.56704943	4	-.57930423	4	-.59089761	3
2.48	-.56710062	4	-.57935305	4	-.59094428	3
2.49	-.56715177	4	-.57940183	2	-.59099092	4
2.50	-.56720288	0	-.57945059	0	-.59103752	0
					-.60203183	0

LOG (G) FOR S=0.5

G-214

P	I=20	I=21	I=22	I=23
0.	-.60077400	0	-.61123943	0
0.01	-.60082567	3	-.61128876	4
0.02	-.60087731	6	-.61133805	5
0.03	-.60092889	4	-.61138729	3
0.04	-.60098043	5	-.61143650	5
0.05	-.60103192	4	-.61148566	4
0.06	-.60108337	5	-.61153478	5
0.07	-.60113477	4	-.61158385	3
0.08	-.60118613	6	-.61163289	5
0.09	-.60123743	3	-.61168188	4
0.10	-.60128870	5	-.61173083	4
0.11	-.60133992	5	-.61177974	4
0.12	-.60139109	4	-.61182861	4
0.13	-.60144222	5	-.61187744	5
0.14	-.60149330	4	-.61192622	3
0.15	-.60154434	5	-.61197497	5
0.16	-.60159533	4	-.61202367	4
0.17	-.60164628	5	-.61207233	4
0.18	-.60169718	4	-.61212095	4
0.19	-.60174804	5	-.61216953	4
0.20	-.60179885	4	-.61221807	4
0.21	-.60184962	4	-.61226657	4
0.22	-.60190035	5	-.61231503	4
0.23	-.60195103	5	-.61236345	4
0.24	-.60200166	3	-.61241183	4
0.25	-.60205226	5	-.61246017	5
0.26	-.60210281	5	-.61250846	3
0.27	-.60215331	3	-.61255672	4
0.28	-.60220378	6	-.61260494	4
0.29	-.60225419	3	-.61265312	4
0.30	-.60230457	5	-.61270126	4
0.31	-.60235490	4	-.61274936	4
0.32	-.60240519	4	-.61279742	4
0.33	-.60245544	5	-.61284544	4
0.34	-.60250564	4	-.61289342	4
0.35	-.60255580	4	-.61294136	4
0.36	-.60260592	4	-.61298926	3
0.37	-.60265600	5	-.61303713	5
0.38	-.60270603	4	-.61308495	3
0.39	-.60275602	4	-.61313274	5
0.40	-.60280597	4	-.61318048	3
0.41	-.60285588	5	-.61322819	4
0.42	-.60290574	4	-.61327586	4
0.43	-.60295556	4	-.61332349	3
0.44	-.60300534	4	-.61337109	5
0.45	-.60305508	4	-.61341864	3
0.46	-.60310478	5	-.61346616	4
0.47	-.60315443	3	-.61351364	4
0.48	-.60320405	5	-.61356108	4
0.49	-.60325362	4	-.61360848	4
0.50	-.60330315	4	-.61365584	3
			-.62330971	4
			-.62335523	4
			-.62340071	3
			-.62344616	3
			-.62349158	4
			-.62353696	4
			-.63298761	2

LOG (G) FOR S=0.5

P	I=20	I=21	I=22	I=23	G-214
0.50	-.60330315 4	-.61365584 3	-.62353696 4	-.63298761 2	
0.51	-.60335264 4	-.61370317 4	-.62358230 3	-.63303114 3	
0.52	-.60340209 4	-.61375046 4	-.62362761 3	-.63307463 4	
0.53	-.60345150 4	-.61379771 3	-.62367289 4	-.63311809 4	
0.54	-.60350087 4	-.61384493 5	-.62371813 3	-.63316151 2	
0.55	-.60355020 5	-.61389210 3	-.62376334 4	-.63320491 4	
0.56	-.60359948 3	-.61393924 3	-.62380851 3	-.63324827 3	
0.57	-.60364873 5	-.61398635 5	-.62385365 4	-.63329160 3	
0.58	-.60369793 3	-.61403341 3	-.62389875 3	-.63333490 3	
0.59	-.60374710 5	-.61408044 4	-.62394382 3	-.63337817 3	
0.60	-.60379622 3	-.61412743 4	-.62398886 4	-.63342141 4	
0.61	-.60384531 5	-.61417438 3	-.62403386 4	-.63346461 2	
0.62	-.60389435 3	-.61422130 4	-.62407882 2	-.63350779 4	
0.63	-.60394336 5	-.61426818 3	-.62412376 4	-.63355093 3	
0.64	-.60399232 3	-.61431503 5	-.62416866 4	-.63359404 3	
0.65	-.60404125 5	-.61436183 3	-.62421352 2	-.63363712 3	
0.66	-.60409013 3	-.61440860 3	-.62425836 4	-.63368017 3	
0.67	-.60413898 5	-.61445534 4	-.62430316 4	-.63372319 3	
0.68	-.60418778 3	-.61450204 4	-.62434792 3	-.63376618 4	
0.69	-.60423655 4	-.61454870 3	-.62439265 3	-.63380913 2	
0.70	-.60428528 4	-.61459533 4	-.62443735 3	-.63385206 4	
0.71	-.60433397 4	-.61464192 4	-.62448202 4	-.63389495 3	
0.72	-.60438262 4	-.61468847 3	-.62452665 3	-.63393781 3	
0.73	-.60443123 4	-.61473499 4	-.62457125 3	-.63398065 4	
0.74	-.60447980 4	-.61478147 3	-.62461582 4	-.63402345 3	
0.75	-.60452833 4	-.61482792 4	-.62466035 3	-.63406622 3	
0.76	-.60457682 3	-.61487433 4	-.62470485 3	-.63410896 3	
0.77	-.60462528 5	-.61492070 3	-.62474932 4	-.63415167 3	
0.78	-.60467369 3	-.61496704 3	-.62479375 3	-.63419435 3	
0.79	-.60472207 4	-.61501335 5	-.62483815 3	-.63423700 3	
0.80	-.60477041 4	-.61505961 2	-.62488252 3	-.63427962 3	
0.81	-.60481871 4	-.61510585 4	-.62492686 4	-.63432221 3	
0.82	-.60486697 3	-.61515205 4	-.62497116 3	-.63436477 3	
0.83	-.60491520 5	-.61519821 3	-.62501543 3	-.63440730 3	
0.84	-.60496338 3	-.61524434 4	-.62505967 3	-.63444980 3	
0.85	-.60501153 4	-.61529043 3	-.62510388 4	-.63449227 3	
0.86	-.60505964 3	-.61533649 4	-.62514805 2	-.63453471 3	
0.87	-.60510772 5	-.61538251 3	-.62519220 4	-.63457712 3	
0.88	-.60515575 3	-.61542850 4	-.62523631 3	-.63461950 3	
0.89	-.60520375 4	-.61547445 3	-.62528039 4	-.63466185 3	
0.90	-.60525171 4	-.61552037 3	-.62532443 2	-.63470417 3	
0.91	-.60529963 4	-.61556626 4	-.62536845 4	-.63474646 2	
0.92	-.60534751 3	-.61561211 4	-.62541243 3	-.63478873 4	
0.93	-.60539536 4	-.61565792 2	-.62545638 3	-.63483096 3	
0.94	-.60544317 3	-.61570371 5	-.62550030 3	-.63487316 2	
0.95	-.60549095 5	-.61574945 2	-.62554419 4	-.63491534 4	
0.96	-.60553868 3	-.61579517 4	-.62558804 2	-.63495748 3	
0.97	-.60558638 4	-.61584085 4	-.62563187 4	-.63499959 3	
0.98	-.60563404 3	-.61588649 3	-.62567566 3	-.63504168 3	
0.99	-.60568167 4	-.61593210 3	-.62571942 3	-.63508374 3	
1.00	-.60572926 4	-.61597768 4	-.62576315 3	-.63512577 4	

LOG (G) FOR S=0.5

P	I=20	I=21	I=22	I=23
G-214				
1.00	-.60572926 4	-.61597768 4	-.62576315 3	-.63512577 4
1.01	-.60577681 4	-.61602322 3	-.62580685 3	-.63516776 2
1.02	-.60582432 3	-.61606873 3	-.62585052 3	-.63520973 2
1.03	-.60587180 4	-.61611421 4	-.62589416 4	-.63525168 4
1.04	-.60591924 3	-.61615965 3	-.62593776 2	-.63529359 3
1.05	-.60596665 4	-.61620506 3	-.62598134 4	-.63533547 2
1.06	-.60601402 4	-.61625044 4	-.62602488 3	-.63537733 4
1.07	-.60606135 3	-.61629578 3	-.62606839 2	-.63541915 2
1.08	-.60610865 4	-.61634109 4	-.62611188 4	-.63546095 3
1.09	-.60615591 3	-.61638636 2	-.62615533 3	-.63550272 3
1.10	-.60620314 4	-.61643161 4	-.62619875 3	-.63554446 3
1.11	-.60625033 4	-.61647682 4	-.62624214 3	-.63558617 3
1.12	-.60629748 3	-.61652199 2	-.62628550 3	-.63562785 2
1.13	-.60634460 4	-.61656714 4	-.62632883 4	-.63566951 3
1.14	-.60639168 3	-.61661225 4	-.62637212 2	-.63571114 3
1.15	-.60643873 4	-.61665732 2	-.62641539 3	-.63575274 3
1.16	-.60648574 4	-.61670237 4	-.62645863 3	-.63579431 3
1.17	-.60653271 3	-.61674738 3	-.62650184 4	-.63583585 3
1.18	-.60657965 3	-.61679236 3	-.62654501 2	-.63587736 2
1.19	-.60662656 4	-.61683731 4	-.62658816 3	-.63591885 3
1.20	-.60667343 4	-.61688222 2	-.62663128 3	-.63596031 3
1.21	-.60672026 3	-.61692711 4	-.62667437 4	-.63600174 3
1.22	-.60676706 3	-.61697196 4	-.62671742 2	-.63604314 2
1.23	-.60681383 4	-.61701677 2	-.62676045 3	-.63608452 3
1.24	-.60686056 4	-.61706156 4	-.62680345 3	-.63612587 3
1.25	-.60690725 3	-.61710631 3	-.62684642 4	-.63616719 3
1.26	-.60695391 3	-.61715103 3	-.62688935 2	-.63620848 3
1.27	-.60700054 4	-.61719572 3	-.62693226 3	-.63624974 2
1.28	-.60704713 3	-.61724038 4	-.62697514 3	-.63629098 3
1.29	-.60709369 4	-.61728500 2	-.62701799 3	-.63633219 3
1.30	-.60714021 3	-.61732960 4	-.62706081 3	-.63637337 2
1.31	-.60718670 4	-.61737416 3	-.62710360 3	-.63641453 4
1.32	-.60723315 3	-.61741869 3	-.62714636 3	-.63645565 2
1.33	-.60727957 4	-.61746319 4	-.62718909 3	-.63649675 2
1.34	-.60732595 3	-.61750765 2	-.62723179 3	-.63653783 4
1.35	-.60737230 3	-.61755209 4	-.62727446 2	-.63657887 2
1.36	-.60741862 4	-.61759649 2	-.62731711 4	-.63661989 3
1.37	-.60746490 3	-.61764087 4	-.62735972 2	-.63666088 2
1.38	-.60751115 3	-.61768521 3	-.62740231 3	-.63670185 3
1.39	-.60755737 4	-.61772952 4	-.62744487 4	-.63674279 3
1.40	-.60760355 4	-.61777379 2	-.62748739 2	-.63678370 3
1.41	-.60764969 2	-.61781804 3	-.62752989 3	-.63682458 2
1.42	-.60769581 4	-.61786226 4	-.62757236 3	-.63686544 3
1.43	-.60774189 4	-.61790644 2	-.62761480 3	-.63690627 3
1.44	-.60778793 2	-.61795060 4	-.62765721 2	-.63694707 2
1.45	-.60783395 4	-.61799472 3	-.62769960 4	-.63698785 3
1.46	-.60787993 4	-.61803881 3	-.62774195 2	-.63702860 2
1.47	-.60792587 2	-.61808287 2	-.62778428 3	-.63706933 4
1.48	-.60797179 4	-.61812691 4	-.62782658 3	-.63711002 2
1.49	-.60801767 4	-.61817091 3	-.62786885 3	-.63715069 2
1.50	-.60806351 2	-.61821488 4	-.62791109 3	-.63719134 3

LOG (G) FOR S=0.5

P	I=20	I=21	I=22	I=23				
1.50	-.60806351	2	-.61821488	4	-.62791109	3	-.63719134	3
1.51	-.60810933	4	-.61825881	2	-.62795330	2	-.63723196	2
1.52	-.60815511	3	-.61830272	3	-.62799549	4	-.63727255	3
1.53	-.60820086	4	-.61834660	3	-.62803764	2	-.63731311	2
1.54	-.60824657	2	-.61839045	3	-.62807977	3	-.63735365	2
1.55	-.60829226	4	-.61843427	4	-.62812187	3	-.63739417	4
1.56	-.60833791	4	-.61847805	2	-.62816394	2	-.63743465	1
1.57	-.60838352	2	-.61852181	3	-.62820599	4	-.63747512	4
1.58	-.60842911	4	-.61856554	4	-.62824800	2	-.63751555	2
1.59	-.60847466	3	-.61860923	2	-.62828999	3	-.63755596	3
1.60	-.60852018	3	-.61865290	3	-.62833195	3	-.63759634	2
1.61	-.60856567	4	-.61869654	3	-.62837388	2	-.63763670	3
1.62	-.60861112	2	-.61874015	4	-.62841579	3	-.63767703	2
1.63	-.60865655	4	-.61878372	2	-.62845767	4	-.63771734	3
1.64	-.60870194	3	-.61882727	3	-.62849951	1	-.63775762	3
1.65	-.60874730	4	-.61887079	3	-.62854134	4	-.63779787	2
1.66	-.60879262	2	-.61891428	4	-.62858313	2	-.63783810	3
1.67	-.60883792	4	-.61895773	2	-.62862490	3	-.63787830	2
1.68	-.60888318	3	-.61900116	3	-.62866664	3	-.63791848	3
1.69	-.60892841	3	-.61904456	3	-.62870835	3	-.63795863	2
1.70	-.60897361	3	-.61908793	3	-.62875003	2	-.63799876	3
1.71	-.60901878	4	-.61913127	3	-.62879169	3	-.63803886	3
1.72	-.60906391	2	-.61917458	3	-.62883332	3	-.63807893	2
1.73	-.60910902	4	-.61921786	2	-.62887492	2	-.63811898	2
1.74	-.60915409	3	-.61926112	4	-.62891650	4	-.63815901	3
1.75	-.60919913	3	-.61930434	3	-.62895804	1	-.63819901	3
1.76	-.60924414	3	-.61934753	2	-.62899957	4	-.63823898	2
1.77	-.60928912	4	-.61939070	3	-.62904106	2	-.63827893	2
1.78	-.60933406	2	-.61943384	4	-.62908253	3	-.63831886	4
1.79	-.60937898	4	-.61947694	2	-.62912397	3	-.63835875	1
1.80	-.60942386	3	-.61952002	3	-.62916538	2	-.63839863	3
1.81	-.60946871	2	-.61956307	3	-.62920677	3	-.63843848	3
1.82	-.60951354	4	-.61960609	3	-.62924813	3	-.63847830	2
1.83	-.60955833	3	-.61964908	2	-.62928946	2	-.63851810	3
1.84	-.60960309	3	-.61969205	4	-.62933077	3	-.63855787	2
1.85	-.60964782	4	-.61973498	2	-.62937205	3	-.63859762	2
1.86	-.60969251	2	-.61977789	4	-.62941330	2	-.63863735	3
1.87	-.60973718	3	-.61982076	2	-.62945453	3	-.63867705	3
1.88	-.60978182	3	-.61986361	3	-.62949573	3	-.63871672	2
1.89	-.60982643	4	-.61990643	3	-.62953690	2	-.63875637	2
1.90	-.60987100	2	-.61994922	2	-.62957805	3	-.63879600	3
1.91	-.60991555	4	-.61999199	4	-.62961917	3	-.63883560	2
1.92	-.60996006	3	-.62003472	2	-.62966026	2	-.63887518	3
1.93	-.61000454	2	-.62007743	3	-.62970133	2	-.63891473	2
1.94	-.61004900	4	-.62012011	3	-.62974238	4	-.63895426	3
1.95	-.61009342	3	-.62016276	3	-.62978339	2	-.63899376	2
1.96	-.61013781	2	-.62020538	2	-.62982438	2	-.63903324	2
1.97	-.61018218	4	-.62024798	4	-.62986535	4	-.63907270	3
1.98	-.61022651	3	-.62029054	2	-.62990628	1	-.63911213	3
1.99	-.61027081	3	-.62033308	3	-.62994720	4	-.63915153	1
2.00	-.61031508	2	-.62037559	2	-.62998808	2	-.63919092	4

G-214

LOG (G) FOR S=0.5

P	I=20	I=21	I=22	I=23				
G-214								
2.00	-.61031508	2	-.62037559	2	-.62998808	2	-.63919092	4
2.01	-.61035933	4	-.62041808	4	-.63002894	2	-.63923027	1
2.02	-.61040354	3	-.62046053	2	-.63006978	3	-.63926961	3
2.03	-.61044772	3	-.62050296	3	-.63011059	3	-.63930892	3
2.04	-.61049187	2	-.62054536	3	-.63015137	2	-.63934820	1
2.05	-.61053600	4	-.62058773	2	-.63019213	3	-.63938747	4
2.06	-.61058009	3	-.62063008	3	-.63023286	3	-.63942670	1
2.07	-.61062415	2	-.62067240	3	-.63027356	2	-.63946592	3
2.08	-.61066819	4	-.62071469	3	-.63031424	2	-.63950511	3
2.09	-.61071219	2	-.62075695	3	-.63035490	3	-.63954427	1
2.10	-.61075617	4	-.62079918	2	-.63039553	3	-.63958342	3
2.11	-.61080011	2	-.62084139	3	-.63043613	2	-.63962254	3
2.12	-.61084403	3	-.62088357	3	-.63047671	3	-.63966163	2
2.13	-.61088792	4	-.62092572	2	-.63051726	2	-.63970070	2
2.14	-.61093177	2	-.62096785	3	-.63055779	3	-.63973975	3
2.15	-.61097560	3	-.62100995	3	-.63059829	2	-.63977877	1
2.16	-.61101940	3	-.62105202	2	-.63063877	3	-.63981778	4
2.17	-.61106317	3	-.62109407	4	-.63067922	2	-.63985675	1
2.18	-.61110691	3	-.62113608	2	-.63071965	3	-.63989571	3
2.19	-.61115062	2	-.62117807	2	-.63076005	2	-.63993464	3
2.20	-.61119431	4	-.62122004	4	-.63080043	3	-.63997354	1
2.21	-.61123796	2	-.62126197	2	-.63084078	2	-.64001243	3
2.22	-.61128159	4	-.62130388	2	-.63088111	3	-.64005129	2
2.23	-.61132518	2	-.62134577	3	-.63092141	2	-.64009013	3
2.24	-.61136875	3	-.62138763	3	-.63096169	3	-.64012894	2
2.25	-.61141229	3	-.62142946	3	-.63100194	3	-.64016773	2
2.26	-.61145580	3	-.62147126	2	-.63104216	1	-.64020650	3
2.27	-.61149928	3	-.62151304	3	-.63108237	3	-.64024524	2
2.28	-.61154273	2	-.62155479	3	-.63112255	3	-.64028396	2
2.29	-.61158616	3	-.62159651	2	-.63116270	2	-.64032266	2
2.30	-.61162956	4	-.62163821	3	-.63120283	3	-.64036134	3
2.31	-.61167292	2	-.62167988	3	-.63124293	2	-.64039999	2
2.32	-.61171626	3	-.62172152	2	-.63128301	2	-.64043862	3
2.33	-.61175957	2	-.62176314	3	-.63132307	3	-.64047722	1
2.34	-.61180286	4	-.62180473	2	-.63136310	3	-.64051581	3
2.35	-.61184611	2	-.62184630	3	-.63140310	2	-.64055437	2
2.36	-.61188934	3	-.62188784	3	-.63144308	2	-.64059291	3
2.37	-.61193254	3	-.62192935	2	-.63148304	3	-.64063142	2
2.38	-.61197571	3	-.62197084	3	-.63152297	2	-.64066991	2
2.39	-.61201885	3	-.62201230	2	-.63156288	2	-.64070838	2
2.40	-.61206196	2	-.62205374	3	-.63160277	3	-.64074683	2
2.41	-.61210505	3	-.62209515	3	-.63164263	2	-.64078526	3
2.42	-.61214811	3	-.62213653	2	-.63168247	3	-.64082366	2
2.43	-.61219114	3	-.62217789	3	-.63172228	2	-.64086204	3
2.44	-.61223414	2	-.62221922	2	-.63176207	3	-.64090039	1
2.45	-.61227712	3	-.62226053	3	-.63180183	2	-.64093873	3
2.46	-.61232007	3	-.62230181	3	-.63184157	2	-.64097704	2
2.47	-.61236299	3	-.62234306	2	-.63188129	3	-.64101533	2
2.48	-.61240588	2	-.62238429	2	-.63192098	2	-.64105360	3
2.49	-.61244875	4	-.62242550	3	-.63196065	3	-.64109184	1
2.50	-.61249158	0	-.62246668	0	-.63200029	0	-.64113007	0

LOG (G) FOR S=0.5

P	I = 24	P	I = 24	P	I = 24	
0.						
0.01	-.63991235	0	0.50	-.64204378	2	1.00
0.02	-.63995576	3	0.51	-.64208563	4	1.01
0.03	-.63999914	3	0.52	-.64212744	3	1.02
0.04	-.64004249	4	0.53	-.64216922	3	1.03
	-.64008580	3	0.54	-.64221097	2	1.04
0.05	-.64012908	3	0.55	-.64225270	4	1.05
0.06	-.64017233	4	0.56	-.64229439	3	1.06
0.07	-.64021554	2	0.57	-.64233605	2	1.07
0.08	-.64025873	4	0.58	-.64237769	4	1.08
0.09	-.64030188	4	0.59	-.64241929	2	1.09
0.10	-.64034499	2	0.60	-.64246087	3	1.10
0.11	-.64038808	4	0.61	-.64250242	3	1.11
0.12	-.64043113	3	0.62	-.64254394	3	1.12
0.13	-.64047415	3	0.63	-.64258543	3	1.13
0.14	-.64051714	4	0.64	-.64262689	3	1.14
0.15	-.64056009	2	0.65	-.64266832	3	1.15
0.16	-.64063032	4	0.66	-.64270972	3	1.16
0.17	-.64064591	3	0.67	-.64275109	2	1.17
0.18	-.64068877	4	0.68	-.64279244	4	1.18
0.19	-.64073159	2	0.69	-.64283375	2	1.19
0.20	-.64077439	4	0.70	-.64287504	3	1.20
0.21	-.64081715	3	0.71	-.64291630	3	1.21
0.22	-.64085988	2	0.72	-.64295753	3	1.22
0.23	-.64090259	5	0.73	-.64299873	3	1.23
0.24	-.64094525	2	0.74	-.64303990	2	1.24
0.25	-.64098789	3	0.75	-.64308105	4	1.25
0.26	-.64103050	4	0.76	-.64312216	2	1.26
0.27	-.64107307	3	0.77	-.64316325	3	1.27
0.28	-.64111561	2	0.78	-.64320431	3	1.28
0.29	-.64115813	4	0.79	-.64324534	2	1.29
0.30	-.64120061	3	0.80	-.64328635	4	1.30
0.31	-.64124306	3	0.81	-.64332732	2	1.31
0.32	-.64128548	4	0.82	-.64336827	3	1.32
0.33	-.64132786	2	0.83	-.64340919	3	1.33
0.34	-.64137022	3	0.84	-.64345008	2	1.34
0.35	-.64141255	4	0.85	-.64349095	3	1.35
0.36	-.64145484	2	0.86	-.64353179	4	1.36
0.37	-.64149711	4	0.87	-.64357259	1	1.37
0.38	-.64153934	3	0.88	-.64361338	4	1.38
0.39	-.64158154	2	0.89	-.64365413	3	1.39
0.40	-.64162372	4	0.90	-.64369485	2	1.40
0.41	-.64166586	3	0.91	-.64373555	3	1.41
0.42	-.64170797	3	0.92	-.64377622	2	1.42
0.43	-.64175005	3	0.93	-.64381687	4	1.43
0.44	-.64179210	2	0.94	-.64385748	2	1.44
0.45	-.64183413	4	0.95	-.64389807	2	1.45
0.46	-.64187612	3	0.96	-.64393864	4	1.46
0.47	-.64191808	3	0.97	-.64397917	2	1.47
0.48	-.64196001	3	0.98	-.64401968	3	1.48
0.49	-.64200191	3	0.99	-.64406016	3	1.49
0.50	-.64204378	2	1.00	-.64410061	2	1.50

G-214

LOG (G) FOR S=0.5

G-214

P	I=24	P	I=24
1.50	-.64608994	2	2.00 -.64801772
1.51	-.64612908	2	2.01 -.64805569
1.52	-.64616820	3	2.02 -.64809363
1.53	-.64620729	3	2.03 -.64813155
1.54	-.64624636	3	2.04 -.64816944
1.55	-.64628540	2	2.05 -.64820732
1.56	-.64632442	3	2.06 -.64824517
1.57	-.64636341	2	2.07 -.64828300
1.58	-.64640238	2	2.08 -.64832080
1.59	-.64644133	3	2.09 -.64835859
1.60	-.64648025	2	2.10 -.64839635
1.61	-.64651915	3	2.11 -.64843409
1.62	-.64655802	2	2.12 -.64847181
1.63	-.64659687	3	2.13 -.64850950
1.64	-.64663569	2	2.14 -.64854718
1.65	-.64667449	2	2.15 -.64858483
1.66	-.64671327	3	2.16 -.64862246
1.67	-.64675202	2	2.17 -.64866006
1.68	-.64679075	2	2.18 -.64869765
1.69	-.64682946	3	2.19 -.64873521
1.70	-.64686814	2	2.20 -.64877276
1.71	-.64690680	3	2.21 -.64881028
1.72	-.64694543	2	2.22 -.64884777
1.73	-.64698404	2	2.23 -.64888525
1.74	-.64702263	3	2.24 -.64892270
1.75	-.64706119	2	2.25 -.64896014
1.76	-.64709973	2	2.26 -.64899755
1.77	-.64713825	3	2.27 -.64903494
1.78	-.64717674	2	2.28 -.64907230
1.79	-.64721521	2	2.29 -.64910965
1.80	-.64725366	3	2.30 -.64914698
1.81	-.64729208	2	2.31 -.64918428
1.82	-.64733048	3	2.32 -.64922156
1.83	-.64736885	1	2.33 -.64925882
1.84	-.64740721	3	2.34 -.64929606
1.85	-.64744554	3	2.35 -.64933328
1.86	-.64748384	1	2.36 -.64937047
1.87	-.64752213	3	2.37 -.64940765
1.88	-.64756039	3	2.38 -.64944480
1.89	-.64759862	1	2.39 -.64948193
1.90	-.64763684	3	2.40 -.64951905
1.91	-.64767503	2	2.41 -.64955614
1.92	-.64771320	3	2.42 -.64959320
1.93	-.64775134	2	2.43 -.64963025
1.94	-.64778946	2	2.44 -.64966728
1.95	-.64782756	2	2.45 -.64970428
1.96	-.64786564	3	2.46 -.64974127
1.97	-.64790369	1	2.47 -.64977823
1.98	-.64794173	3	2.48 -.64981518
1.99	-.64797974	3	2.49 -.64985210
2.00	-.64801772	1	2.50 -.64988900

LOG (G) FOR S=1.5

P	I=12	I=13	I=14	I=15	
0.	0.90628185 0	0.92267227 0	0.93791223 0	0.95215267 0	
0.01	0.90653222 -37	0.92290477 -32	0.93812924 -28	0.95235613 -26	
0.02	0.90678222 -36	0.92313695 -32	0.93834597 -27	0.95255933 -23	
0.03	0.90703186 -36	0.92336881 -31	0.93856243 -28	0.95276230 -25	
0.04	0.90728114 -37	0.92360036 -31	0.93877861 -28	0.95296502 -24	
0.05	0.90753005 -36	0.92383160 -32	0.93899451 -27	0.95316750 -24	
0.06	0.90777860 -36	0.92406252 -31	0.93921014 -27	0.95336974 -24	
0.07	0.90802679 -37	0.92429313 -31	0.93942550 -28	0.95357174 -24	
0.08	0.90827461 -34	0.92452343 -31	0.93964058 -26	0.95377350 -25	
0.09	0.90852209 -37	0.92475342 -31	0.93985540 -28	0.95397501 -23	
0.10	0.90876920 -35	0.92498310 -31	0.94006994 -27	0.95417629 -24	
0.11	0.90901596 -35	0.92521247 -31	0.94028421 -26	0.95437733 -23	
0.12	0.90926237 -36	0.92544153 -30	0.94049822 -27	0.95457814 -24	
0.13	0.90950842 -35	0.92567029 -31	0.94071196 -27	0.95477871 -24	
0.14	0.90975412 -35	0.92589874 -30	0.94092543 -27	0.95497904 -23	
0.15	0.90999947 -35	0.92612689 -30	0.94113863 -26	0.95517914 -24	
0.16	0.91024447 -34	0.92635474 -30	0.94135157 -27	0.95537900 -23	
0.17	0.91048913 -35	0.92658229 -31	0.94156424 -26	0.95557863 -24	
0.18	0.91073344 -35	0.92680953 -30	0.94177665 -26	0.95577802 -23	
0.19	0.91097740 -35	0.92703647 -29	0.94198880 -27	0.95597718 -22	
0.20	0.91122101 -33	0.92726312 -31	0.94220068 -25	0.95617612 -24	
0.21	0.91146429 -35	0.92748946 -29	0.94241231 -27	0.95637482 -23	
0.22	0.91170722 -34	0.927711551 -30	0.94262367 -26	0.95657329 -24	
0.23	0.91194981 -34	0.92794126 -29	0.94283477 -26	0.95677152 -21	
0.24	0.91219206 -33	0.92816672 -30	0.94304561 -25	0.95696954 -24	
0.25	0.91243398 -35	0.92839188 -29	0.94325620 -26	0.95716732 -23	
0.26	0.91267555 -33	0.92861675 -29	0.94346653 -26	0.95736487 -22	
0.27	0.91291679 -33	0.92884133 -29	0.94367660 -26	0.95756220 -23	
0.28	0.91315770 -34	0.92906562 -30	0.94388641 -25	0.95775930 -23	
0.29	0.91339827 -34	0.92928961 -28	0.94409597 -25	0.95795617 -22	
0.30	0.91363850 -32	0.92951332 -30	0.94430528 -26	0.95815282 -23	
0.31	0.91387841 -34	0.92973673 -28	0.94451433 -25	0.95834924 -22	
0.32	0.91411798 -32	0.92995986 -29	0.94472313 -26	0.95854544 -22	
0.33	0.91435723 -33	0.93018270 -28	0.94493167 -24	0.95874142 -22	
0.34	0.91459615 -33	0.93040526 -29	0.94513997 -26	0.95893718 -23	
0.35	0.91483474 -33	0.93062753 -29	0.94534801 -25	0.95913271 -22	
0.36	0.91507300 -32	0.93084951 -27	0.94555580 -24	0.95932802 -22	
0.37	0.91531094 -33	0.93107122 -29	0.94576335 -26	0.95952311 -23	
0.38	0.91554855 -32	0.93129264 -29	0.94597064 -24	0.95971797 -21	
0.39	0.91578584 -32	0.93151377 -27	0.94617769 -25	0.95991262 -22	
0.40	0.91602281 -32	0.93173463 -28	0.94638449 -24	0.96010705 -22	
0.41	0.91625946 -32	0.93195521 -28	0.94659105 -26	0.96030126 -21	
0.42	0.91649579 -32	0.93217551 -29	0.94679735 -23	0.96049526 -23	
0.43	0.91673180 -32	0.93239552 -26	0.94700342 -25	0.96068903 -21	
0.44	0.91696749 -32	0.93261527 -29	0.94720924 -25	0.96088259 -22	
0.45	0.91720286 -31	0.93283473 -27	0.94741481 -23	0.96107593 -21	
0.46	0.91743792 -32	0.93305392 -27	0.94762015 -25	0.96126906 -22	
0.47	0.91767266 -31	0.93327284 -28	0.94782524 -25	0.96146197 -21	
0.48	0.91790709 -31	0.93349148 -28	0.94803008 -23	0.96165467 -22	
0.49	0.91814121 -31	0.93370984 -26	0.94823469 -24	0.96184715 -21	
0.50	0.91837502 -32	0.93392794 -28	0.94843906 -24	0.96203942 -21	

G-214

G-214

LOG(G) FOR S=1.5

P	I=12	I=13	I=14	I=15
0.50	0.91837502 -32	0.93392794 -28	0.94843906 -24	0.96203942 -21
0.51	0.91860851 -30	0.93414576 -27	0.94864319 -24	0.96223148 -21
0.52	0.91884170 -32	0.93436331 -26	0.94884708 -24	0.96242333 -22
0.53	0.91907457 -30	0.93458060 -28	0.94905073 -24	0.96261496 -21
0.54	0.91930714 -31	0.93479761 -27	0.94925414 -23	0.96280638 -20
0.55	0.91953940 -31	0.93501435 -26	0.94945732 -24	0.96299760 -22
0.56	0.91977135 -30	0.93523083 -27	0.94966026 -23	0.96318860 -21
0.57	0.92000300 -30	0.93544704 -27	0.94986297 -24	0.96337939 -20
0.58	0.92023435 -31	0.93566298 -26	0.95006544 -24	0.96356998 -22
0.59	0.92046539 -30	0.93587866 -26	0.95026767 -22	0.96376035 -20
0.60	0.92069613 -30	0.93609408 -27	0.95046968 -24	0.96395052 -21
0.61	0.92092657 -30	0.93630923 -27	0.95067145 -24	0.96414048 -20
0.62	0.92115671 -30	0.93652411 -25	0.95087298 -22	0.96433024 -21
0.63	0.92138655 -30	0.93673874 -27	0.95107429 -24	0.96451979 -21
0.64	0.92161609 -30	0.93695310 -26	0.95127536 -22	0.96470913 -20
0.65	0.92184533 -29	0.93716720 -25	0.95147621 -24	0.96489827 -21
0.66	0.92207428 -30	0.93738105 -27	0.95167682 -22	0.96508720 -20
0.67	0.92230293 -29	0.93759463 -25	0.95187721 -23	0.96527593 -21
0.68	0.92253129 -30	0.93780796 -27	0.95207737 -23	0.96546445 -19
0.69	0.92275935 -29	0.93802102 -25	0.95227730 -23	0.96565278 -21
0.70	0.92298712 -29	0.93823383 -25	0.95247700 -22	0.96584090 -20
0.71	0.92321460 -30	0.93844639 -26	0.95267648 -24	0.96602882 -21
0.72	0.92344178 -28	0.93865869 -26	0.95287572 -21	0.96621653 -19
0.73	0.92366868 -29	0.93887073 -25	0.95307475 -23	0.96640405 -20
0.74	0.92389529 -30	0.93908252 -25	0.95327355 -23	0.96659137 -21
0.75	0.92412160 -28	0.93929406 -26	0.95347212 -21	0.96677848 -19
0.76	0.92434763 -28	0.93950534 -25	0.95367048 -23	0.96696540 -20
0.77	0.92457338 -30	0.93971637 -25	0.95386861 -23	0.96715212 -20
0.78	0.92479883 -27	0.93992715 -25	0.95406651 -21	0.96733864 -20
0.79	0.92502401 -30	0.94013768 -25	0.95426420 -23	0.96752496 -19
0.80	0.92524889 -27	0.94034796 -24	0.95446166 -22	0.96771109 -20
0.81	0.92547350 -29	0.94055800 -26	0.95465890 -21	0.96789702 -20
0.82	0.92569782 -28	0.94076778 -25	0.95485593 -23	0.96808275 -19
0.83	0.92592186 -28	0.94097731 -24	0.95505273 -22	0.96826829 -20
0.84	0.92614562 -29	0.94118660 -25	0.95524931 -21	0.96845363 -20
0.85	0.92636909 -27	0.94139564 -24	0.95544568 -22	0.96863877 -19
0.86	0.92659229 -28	0.94160444 -25	0.95564183 -22	0.96882372 -19
0.87	0.92681521 -27	0.94181299 -24	0.95583776 -21	0.96900848 -19
0.88	0.92703786 -29	0.94202130 -25	0.95603348 -23	0.96919305 -20
0.89	0.92726022 -27	0.94222936 -24	0.95622897 -20	0.96937742 -19
0.90	0.92748231 -27	0.94243718 -24	0.95642426 -22	0.96956160 -19
0.91	0.92770413 -28	0.94264476 -24	0.95661933 -22	0.96974559 -20
0.92	0.92792567 -28	0.94285210 -24	0.95681418 -21	0.96992938 -18
0.93	0.92814693 -26	0.94305920 -25	0.95700882 -21	0.97011299 -20
0.94	0.92836793 -28	0.94326605 -23	0.95720325 -22	0.97029640 -18
0.95	0.92858865 -27	0.94347267 -25	0.95739746 -21	0.97047963 -20
0.96	0.92880910 -27	0.94367904 -23	0.95759146 -20	0.97066266 -18
0.97	0.92902928 -28	0.94388518 -24	0.95778526 -22	0.97084551 -20
0.98	0.92924918 -25	0.94409108 -23	0.95797884 -22	0.97102816 -18
0.99	0.92946883 -28	0.94429675 -25	0.95817220 -20	0.97121063 -19
1.00	0.92968820 -27	0.94450217 -22	0.95836536 -21	0.97139291 -18

LOG (G) FOR S=1.5

P	I=12	I=13	I=14	I=15	
1.00	0.92968820 -27	0.94450217 -22	0.95836536 -21	0.97139291 -18	
1.01	0.92990730 -26	0.94470737 -25	0.95855831 -20	0.97157501 -19	
1.02	0.93012614 -27	0.94491232 -23	0.95875106 -22	0.97175692 -19	
1.03	0.93034471 -26	0.94511704 -23	0.95894359 -21	0.97193864 -19	
1.04	0.93056302 -27	0.94532153 -23	0.95913591 -20	0.97212017 -18	
1.05	0.93078106 -26	0.94552579 -24	0.95932803 -21	0.97230152 -18	G-214
1.06	0.93099884 -27	0.94572981 -23	0.95951994 -20	0.97248269 -19	
1.07	0.93121635 -25	0.94593360 -23	0.95971165 -21	0.97266367 -19	
1.08	0.93143361 -27	0.94613716 -23	0.95990315 -21	0.97284446 -18	
1.09	0.93165060 -26	0.94634049 -23	0.96009444 -20	0.97302507 -18	
1.10	0.93186733 -26	0.94654359 -24	0.96028553 -21	0.97320550 -18	
1.11	0.93208380 -26	0.94674645 -22	0.96047641 -20	0.97338575 -19	
1.12	0.93230001 -26	0.94694909 -23	0.96066709 -20	0.97356581 -18	
1.13	0.93251596 -25	0.94715150 -22	0.96085757 -20	0.97374569 -18	
1.14	0.93273166 -26	0.94735369 -24	0.96104785 -21	0.97392539 -18	
1.15	0.93294710 -26	0.94755564 -22	0.96123792 -20	0.97410491 -18	
1.16	0.93316228 -26	0.94775737 -22	0.96142779 -20	0.97428425 -18	
1.17	0.93337720 -25	0.94795888 -24	0.96161746 -20	0.97446341 -18	
1.18	0.93359187 -25	0.94816015 -21	0.96180693 -20	0.97464239 -18	
1.19	0.93380629 -26	0.94836121 -23	0.96199620 -20	0.97482119 -18	
1.20	0.93402045 -25	0.94856204 -23	0.96218527 -20	0.97499981 -18	
1.21	0.93423436 -25	0.94876264 -22	0.96237414 -20	0.97517825 -18	
1.22	0.93444802 -26	0.94896302 -22	0.96256281 -19	0.97535651 -17	
1.23	0.93466142 -24	0.94916318 -22	0.96275129 -21	0.97553460 -18	
1.24	0.93487458 -26	0.94936312 -22	0.96293956 -19	0.97571251 -18	
1.25	0.93508748 -24	0.94956284 -23	0.96312764 -19	0.97589024 -18	
1.26	0.93530014 -26	0.94976233 -21	0.96331553 -21	0.97606779 -17	
1.27	0.93551254 -24	0.94996161 -22	0.96350321 -19	0.97624517 -17	
1.28	0.93572470 -25	0.95016067 -23	0.96369070 -19	0.97642238 -19	
1.29	0.93593661 -25	0.95035950 -21	0.96387800 -20	0.97659940 -16	
1.30	0.93614827 -24	0.95055812 -22	0.96406510 -20	0.97677626 -18	
1.31	0.93635969 -25	0.95075652 -22	0.96425200 -19	0.97695294 -18	
1.32	0.93657086 -24	0.95095470 -21	0.96443871 -19	0.97712944 -17	
1.33	0.93678179 -25	0.95115267 -22	0.96462523 -19	0.97730577 -17	
1.34	0.93699247 -24	0.95135042 -22	0.96481156 -20	0.97748193 -17	
1.35	0.93720291 -25	0.95154795 -21	0.96499769 -19	0.97765792 -18	
1.36	0.93741310 -23	0.95174527 -21	0.96518363 -19	0.97783373 -17	
1.37	0.93762306 -25	0.95194238 -22	0.96536938 -19	0.97800937 -17	
1.38	0.93783277 -24	0.95213927 -22	0.96555494 -19	0.97818484 -17	
1.39	0.93804224 -24	0.952333594 -20	0.96574031 -20	0.97836014 -18	
1.40	0.93825147 -24	0.95253241 -22	0.96592548 -18	0.97853526 -16	
1.41	0.93846046 -24	0.95272866 -21	0.96611047 -19	0.97871022 -17	
1.42	0.93866921 -24	0.95292470 -22	0.96629527 -19	0.97888501 -18	
1.43	0.93887772 -23	0.95312052 -20	0.96647988 -19	0.97905962 -16	
1.44	0.93908600 -24	0.95331614 -22	0.96666430 -19	0.97923407 -17	
1.45	0.93929404 -24	0.95351154 -20	0.96684853 -18	0.97940835 -17	
1.46	0.93950184 -24	0.95370674 -21	0.96703258 -20	0.97958246 -17	
1.47	0.93970940 -23	0.95390173 -22	0.96721643 -17	0.97975640 -16	
1.48	0.93991673 -23	0.95409650 -20	0.96740011 -20	0.97993018 -18	
1.49	0.94012383 -24	0.95429107 -21	0.96758359 -18	0.98010378 -16	
1.50	0.94033069 -24	0.95448543 -20	0.96776689 -18	0.98027722 -17	

LOG (G) FOR S=1.5

P	I=12	I=13	I=14	I=15
G-214				
1.50	0.94033069 -24	0.95448543 -20	0.96776689 -18	0.98027722 -17
1.51	0.94053731 -22	0.95467959 -21	0.96795001 -19	0.98045049 -16
1.52	0.94074371 -24	0.95487354 -21	0.96813294 -19	0.98062360 -17
1.53	0.94094987 -23	0.95506728 -21	0.96831568 -18	0.98079654 -16
1.54	0.94115580 -23	0.95526081 -20	0.96849824 -18	0.98096932 -17
1.55	0.94136150 -23	0.95545414 -20	0.96868062 -19	0.98114193 -17
1.56	0.94156697 -24	0.95564727 -21	0.96886281 -18	0.98131437 -16
1.57	0.94177220 -22	0.95584019 -21	0.96904482 -18	0.98148665 -16
1.58	0.94197721 -23	0.95603290 -19	0.96922665 -18	0.98165877 -17
1.59	0.94218199 -23	0.95622542 -21	0.96940830 -18	0.98183072 -16
1.60	0.94238654 -22	0.95641773 -20	0.96958977 -19	0.98200251 -16
1.61	0.94259087 -24	0.95660984 -21	0.96977105 -17	0.98217414 -17
1.62	0.94279496 -22	0.95680174 -19	0.96995216 -19	0.98234560 -16
1.63	0.94299883 -22	0.95699345 -21	0.97013308 -18	0.98251690 -16
1.64	0.94320248 -23	0.95718495 -20	0.97031382 -17	0.98268804 -16
1.65	0.94340590 -23	0.95737625 -19	0.97049439 -19	0.98285902 -17
1.66	0.94360909 -22	0.95756736 -21	0.97067477 -17	0.98302983 -15
1.67	0.94381206 -22	0.95775826 -19	0.97085498 -18	0.98320049 -17
1.68	0.94401481 -23	0.95794897 -21	0.97103501 -18	0.98337098 -15
1.69	0.94421733 -22	0.95813947 -19	0.97121486 -18	0.98354132 -17
1.70	0.94441963 -22	0.95832978 -20	0.97139453 -17	0.98371149 -15
1.71	0.94462171 -22	0.95851989 -19	0.97157403 -18	0.98388151 -17
1.72	0.94482357 -23	0.95870981 -20	0.97175335 -18	0.98405136 -15
1.73	0.94502520 -21	0.95889953 -20	0.97193249 -17	0.98422106 -16
1.74	0.94522662 -23	0.95908905 -20	0.97211146 -18	0.98439060 -16
1.75	0.94542781 -21	0.95927837 -19	0.97229025 -17	0.98455998 -16
1.76	0.94562879 -22	0.95946750 -19	0.97246887 -18	0.98472920 -15
1.77	0.94582955 -22	0.95965644 -20	0.97264731 -17	0.98489827 -16
1.78	0.94603009 -22	0.95984518 -19	0.97282558 -17	0.98506718 -16
1.79	0.94623041 -22	0.96003373 -20	0.97300368 -18	0.98523593 -15
1.80	0.94643051 -21	0.96022208 -19	0.97318160 -17	0.98540453 -17
1.81	0.94663040 -22	0.96041024 -19	0.97335935 -18	0.98557296 -14
1.82	0.94683007 -21	0.96059821 -19	0.97353692 -17	0.98574125 -16
1.83	0.94702953 -22	0.96078599 -20	0.97371432 -16	0.98590938 -16
1.84	0.94722877 -21	0.96097357 -19	0.97389156 -18	0.98607735 -15
1.85	0.94742780 -22	0.96116096 -18	0.97406862 -17	0.98624517 -16
1.86	0.94762661 -21	0.96134817 -20	0.97424551 -18	0.98641283 -15
1.87	0.94782521 -21	0.96153518 -19	0.97442222 -16	0.98658034 -16
1.88	0.94802360 -21	0.96172200 -18	0.97459877 -17	0.98674769 -14
1.89	0.94822178 -22	0.96190864 -20	0.97477515 -17	0.98691490 -16
1.90	0.94841974 -21	0.96209508 -18	0.97495136 -17	0.98708195 -16
1.91	0.94861749 -21	0.96228134 -20	0.97512740 -18	0.98724884 -15
1.92	0.94881503 -21	0.96246740 -18	0.97530326 -15	0.98741558 -14
1.93	0.94901236 -21	0.96265328 -18	0.97547897 -18	0.98758218 -16
1.94	0.94920948 -21	0.96283898 -20	0.97565450 -17	0.98774862 -16
1.95	0.94940639 -21	0.96302448 -18	0.97582986 -16	0.98791490 -14
1.96	0.94960309 -20	0.96320980 -18	0.97600506 -17	0.98808104 -15
1.97	0.94979959 -22	0.96339494 -19	0.97618009 -16	0.98824703 -16
1.98	0.94999587 -20	0.96357989 -19	0.97635496 -17	0.98841286 -14
1.99	0.95019195 -20	0.96376465 -18	0.97652966 -17	0.98857855 -16
2.00	0.95038783 -22	0.96394923 -19	0.97670419 -17	0.98874408 -14

LOG (G) FOR S=1.5

P	I=12	I=13	I=14	I=15	
2.00	0.95038783 -22	0.96394923 -19	0.97670419 -17	0.98874408 -14	
2.01	0.95058349 -20	0.96413362 -18	0.97687855 -16	0.98890947 -16	
2.02	0.95077895 -20	0.96431783 -18	0.97705275 -16	0.98907470 -14	
2.03	0.95097421 -21	0.96450186 -19	0.97722679 -17	0.98923979 -15	
2.04	0.95116926 -21	0.96468570 -18	0.97740066 -16	0.98940473 -16	
2.05	0.95136410 -20	0.96486936 -18	0.97757437 -17	0.98956951 -13	
2.06	0.95155874 -20	0.96505284 -18	0.97774791 -16	0.98973416 -16	
2.07	0.95175318 -21	0.96523614 -18	0.97792129 -16	0.98989865 -14	
2.08	0.95194741 -19	0.96541926 -19	0.97809451 -17	0.99006300 -16	
2.09	0.95214145 -21	0.96560219 -18	0.97826756 -15	0.99022719 -13	
2.10	0.95233528 -20	0.96578494 -17	0.97844046 -17	0.99039125 -16	
2.11	0.95252891 -21	0.96596752 -19	0.97861319 -17	0.99055515 -14	
2.12	0.95272233 -19	0.96614991 -17	0.97878575 -15	0.99071891 -15	
2.13	0.95291556 -20	0.96633213 -19	0.97895816 -16	0.99088252 -14	
2.14	0.95310859 -21	0.96651416 -17	0.97913041 -17	0.99104599 -15	
2.15	0.95330141 -19	0.96669602 -18	0.97930249 -15	0.99120931 -14	
2.16	0.95349404 -20	0.96687770 -18	0.97947442 -17	0.99137249 -15	
2.17	0.95368647 -20	0.96705920 -17	0.97964618 -16	0.99153552 -14	
2.18	0.95387870 -19	0.96724053 -19	0.97981778 -15	0.99169841 -15	
2.19	0.95407074 -21	0.96742167 -17	0.97998923 -16	0.99186115 -14	
2.20	0.95426257 -19	0.96760264 -17	0.98016052 -17	0.99202375 -15	
2.21	0.95445421 -20	0.96778344 -18	0.98033164 -15	0.99218620 -14	
2.22	0.95464565 -19	0.96796406 -18	0.98050261 -16	0.99234851 -14	
2.23	0.95483690 -20	0.96814450 -17	0.98067342 -15	0.99251068 -14	
2.24	0.95502795 -19	0.96832477 -18	0.98084408 -17	0.99267271 -15	
2.25	0.95521881 -20	0.96850486 -17	0.98101457 -15	0.99283459 -14	
2.26	0.95540947 -19	0.96868478 -18	0.98118491 -16	0.99299633 -14	
2.27	0.95559994 -20	0.96886452 -17	0.98135509 -15	0.99315793 -14	
2.28	0.95579021 -19	0.96904409 -17	0.98152512 -16	0.99331939 -15	
2.29	0.95598029 -19	0.96922349 -17	0.98169499 -16	0.99348070 -13	
2.30	0.95617018 -20	0.96940272 -18	0.98186470 -15	0.99364188 -15	
2.31	0.95635987 -18	0.96958177 -17	0.98203426 -15	0.99380291 -14	
2.32	0.95654938 -20	0.96976065 -17	0.98220367 -16	0.99396380 -13	
2.33	0.95673869 -19	0.96993936 -17	0.98237292 -16	0.99412456 -15	
2.34	0.95692781 -19	0.97011790 -17	0.98254201 -15	0.99428517 -14	
2.35	0.95711674 -20	0.97029627 -18	0.98271095 -15	0.99444564 -13	
2.36	0.95730547 -18	0.97047446 -16	0.98287974 -16	0.99460598 -15	
2.37	0.95749402 -19	0.97065249 -17	0.98304837 -15	0.99476617 -13	
2.38	0.95768238 -19	0.97083035 -18	0.98321685 -15	0.99492623 -14	
2.39	0.95787055 -18	0.97100803 -16	0.98338518 -16	0.99508615 -15	
2.40	0.95805854 -20	0.97118555 -17	0.98355335 -15	0.99524592 -13	
2.41	0.95824633 -18	0.97136290 -17	0.98372137 -15	0.99540556 -13	
2.42	0.95843394 -19	0.97154008 -17	0.98388924 -15	0.99556507 -15	
2.43	0.95862136 -19	0.97171709 -16	0.98405696 -15	0.99572443 -13	
2.44	0.95880859 -19	0.97189394 -17	0.98422453 -15	0.99588366 -14	
2.45	0.95899563 -18	0.97207062 -17	0.98439195 -16	0.99604275 -13	
2.46	0.95918249 -18	0.97224713 -17	0.98455921 -14	0.99620171 -15	
2.47	0.95936917 -19	0.97242347 -16	0.98472633 -16	0.99636052 -12	
2.48	0.95955566 -19	0.97259965 -17	0.98489329 -14	0.99651921 -15	
2.49	0.95974196 -18	0.97277566 -16	0.98506011 -16	0.99667775 -13	
2.50	0.95992808 0	0.97295151 0	0.98522677 0	0.99683616 0	

G-214

LOG (G) FOR S=1.5

G-214

P	I=16	I=17	I=18	I=19
0.	0.96551663 0	0.97810576 0	0.99000498 0	1.00128599 0
0.01	0.96570813 -23	0.97828662 -20	0.99017633 -18	1.00144878 -17
0.02	0.96589940 -21	0.97846728 -18	0.99034750 -17	1.00161140 -15
0.03	0.96609046 -22	0.97864776 -20	0.99051850 -18	1.00177387 -16
0.04	0.96628130 -21	0.97882804 -20	0.99068932 -17	1.00193618 -16
0.05	0.96647193 -22	0.97900812 -18	0.99085997 -17	1.00209833 -15
0.06	0.96666234 -21	0.97918802 -20	0.99103045 -18	1.00226033 -16
0.07	0.96685254 -21	0.97936772 -19	0.99120075 -17	1.00242217 -16
0.08	0.96704253 -22	0.97954723 -19	0.99137088 -16	1.00258385 -14
0.09	0.96723230 -21	0.97972655 -18	0.99154085 -18	1.00274539 -17
0.10	0.96742186 -21	0.97990569 -20	0.99171064 -17	1.00290676 -15
0.11	0.96761121 -21	0.98008463 -19	0.99188026 -17	1.00306798 -15
0.12	0.96780035 -21	0.98026338 -18	0.99204971 -17	1.00322905 -15
0.13	0.96798928 -21	0.98044195 -19	0.99221899 -17	1.00338997 -16
0.14	0.96817800 -22	0.98062033 -19	0.99238810 -16	1.00355073 -15
0.15	0.96836650 -20	0.98079852 -19	0.99255705 -18	1.00371134 -16
0.16	0.96855480 -20	0.98097652 -18	0.99272582 -16	1.00387179 -14
0.17	0.96874290 -22	0.98115434 -19	0.99289443 -17	1.00403210 -16
0.18	0.96893078 -20	0.98133197 -19	0.99306287 -17	1.00419225 -15
0.19	0.96911846 -21	0.98150941 -18	0.99323114 -16	1.00435225 -15
0.20	0.96930593 -20	0.98168667 -18	0.99339925 -17	1.00451210 -15
0.21	0.96949320 -21	0.98186375 -19	0.99356719 -17	1.00467180 -15
0.22	0.96968026 -21	0.98204064 -18	0.99373496 -16	1.00483135 -15
0.23	0.96986711 -20	0.98221735 -18	0.99390257 -17	1.00499075 -15
0.24	0.97005376 -20	0.98239388 -19	0.99407001 -16	1.00515000 -15
0.25	0.97024021 -20	0.98257022 -18	0.99423729 -17	1.00530910 -14
0.26	0.97042646 -21	0.98274638 -18	0.99440440 -16	1.00546806 -16
0.27	0.97061250 -20	0.98292236 -18	0.99457135 -16	1.00562686 -14
0.28	0.97079834 -20	0.98309816 -18	0.99473814 -17	1.00578552 -16
0.29	0.97098398 -21	0.98327378 -19	0.99490476 -15	1.00594402 -14
0.30	0.97116941 -19	0.98344921 -17	0.99507123 -17	1.00610238 -14
0.31	0.97135465 -20	0.98362447 -18	0.99523753 -17	1.00626060 -16
0.32	0.97153969 -20	0.98379955 -18	0.99540366 -15	1.00641866 -14
0.33	0.97172453 -20	0.98397445 -18	0.99556964 -17	1.00657658 -15
0.34	0.97190917 -20	0.98414917 -18	0.99573545 -15	1.00673435 -14
0.35	0.97209361 -20	0.98432371 -17	0.99590111 -17	1.00689198 -15
0.36	0.97227785 -19	0.98449808 -18	0.99606660 -16	1.00704946 -14
0.37	0.97246190 -20	0.98467227 -18	0.99623193 -15	1.00720680 -15
0.38	0.97264575 -20	0.98484628 -18	0.99639711 -17	1.00736399 -14
0.39	0.97282940 -19	0.98502011 -17	0.99656212 -15	1.00752104 -15
0.40	0.97301286 -20	0.98519377 -17	0.99672698 -16	1.00767794 -14
0.41	0.97319612 -19	0.98536726 -19	0.99689168 -16	1.00783470 -14
0.42	0.97337919 -20	0.98554056 -16	0.99705622 -16	1.00799132 -15
0.43	0.97356206 -19	0.98571370 -18	0.99722060 -16	1.00814779 -14
0.44	0.97374474 -19	0.98588666 -17	0.99738482 -15	1.00830412 -14
0.45	0.97392723 -20	0.98605945 -18	0.99754889 -16	1.00846031 -15
0.46	0.97410952 -19	0.98623206 -17	0.99771280 -15	1.00861635 -13
0.47	0.97429162 -19	0.98640450 -17	0.99787656 -17	1.00877226 -15
0.48	0.97447353 -19	0.98657677 -17	0.99804015 -14	1.00892802 -14
0.49	0.97465525 -19	0.98674887 -18	0.99820360 -16	1.00908364 -14
0.50	0.97483678 -19	0.98692079 -17	0.99836689 -16	1.00923912 -14

LOG (G) FOR S=1.5

P	I=16	I=17	I=18	I=19
0.50	0.97483678 -19	0.98692079 -17	0.99836689 -16	1.00923912 -14
0.51	0.97501812 -20	0.98709254 -16	0.99853002 -15	1.00939446 -14
0.52	0.97519926 -18	0.98726413 -18	0.99869300 -16	1.00954966 -15
0.53	0.97538022 -19	0.98743554 -17	0.99885582 -14	1.00970471 -13
0.54	0.97556099 -19	0.98760678 -16	0.99901850 -17	1.00985963 -14
0.55	0.97574157 -18	0.98777786 -18	0.99918101 -14	1.01001441 -14
0.56	0.97592197 -19	0.98794876 -16	0.99934338 -16	1.01016905 -14
0.57	0.97610218 -20	0.98811950 -18	0.99950559 -15	1.01032355 -13
0.58	0.97628219 -17	0.98829006 -16	0.99966765 -15	1.01047792 -15
0.59	0.97646203 -19	0.98846046 -17	0.99982956 -15	1.01063214 -13
0.60	0.97664168 -19	0.98863069 -16	0.99999132 -16	1.01078623 -14
0.61	0.97682114 -19	0.98880076 -17	1.00015292 -15	1.01094018 -14
0.62	0.97700041 -17	0.98897066 -17	1.00031437 -14	1.01109399 -14
0.63	0.97717951 -20	0.98914039 -17	1.00047568 -16	1.01124766 -13
0.64	0.97735841 -17	0.98930995 -15	1.00063683 -14	1.01140120 -14
0.65	0.97753714 -19	0.98947936 -18	1.00079784 -16	1.01155460 -13
0.66	0.97771568 -18	0.98964859 -16	1.00095869 -15	1.01170787 -14
0.67	0.97789404 -19	0.98981766 -16	1.00111939 -14	1.01186100 -14
0.68	0.97807221 -17	0.98998657 -17	1.00127995 -15	1.01201399 -13
0.69	0.97825021 -19	0.99015531 -16	1.00144036 -15	1.01216685 -14
0.70	0.97842802 -18	0.99032389 -17	1.00160062 -15	1.01231957 -13
0.71	0.97860565 -18	0.99049230 -15	1.00176073 -15	1.01247216 -13
0.72	0.97878310 -18	0.99066056 -17	1.00192069 -14	1.01262462 -14
0.73	0.97896037 -17	0.99082865 -16	1.00208051 -15	1.01277694 -14
0.74	0.97913747 -19	0.99099658 -17	1.00224018 -15	1.01292912 -12
0.75	0.97931438 -18	0.99116434 -15	1.00239970 -14	1.01308118 -14
0.76	0.97949111 -17	0.99133195 -17	1.00255908 -15	1.01323310 -14
0.77	0.97966767 -19	0.99149939 -15	1.00271831 -15	1.01338488 -12
0.78	0.97984404 -17	0.99166668 -17	1.00287739 -14	1.01353654 -14
0.79	0.98002024 -17	0.99183380 -15	1.00303633 -14	1.01368806 -13
0.80	0.98019627 -19	0.99200077 -17	1.00319513 -15	1.01383945 -13
0.81	0.98037211 -17	0.99216757 -15	1.00335378 -15	1.01399071 -13
0.82	0.98054778 -17	0.99233422 -17	1.00351228 -13	1.01414184 -14
0.83	0.98072328 -18	0.99250070 -15	1.00367065 -16	1.01429283 -12
0.84	0.98089860 -18	0.99266703 -16	1.00382886 -13	1.01444370 -14
0.85	0.98107374 -17	0.99283320 -15	1.00398694 -15	1.01459443 -13
0.86	0.98124871 -18	0.99299922 -17	1.00414487 -14	1.01474503 -12
0.87	0.98142350 -16	0.99316507 -15	1.00430266 -14	1.01489551 -14
0.88	0.98159813 -19	0.99333077 -16	1.0046031 -15	1.01504585 -13
0.89	0.98177257 -16	0.99349631 -15	1.00461781 -14	1.01519606 -12
0.90	0.98194685 -18	0.99366170 -16	1.00477517 -14	1.01534615 -14
0.91	0.98212095 -17	0.99382693 -16	1.00493239 -14	1.01549610 -12
0.92	0.98229488 -17	0.99399200 -15	1.00508947 -14	1.01564593 -14
0.93	0.98246864 -17	0.99415692 -15	1.00524641 -14	1.01579562 -12
0.94	0.98264223 -17	0.99432169 -16	1.00540321 -14	1.01594519 -12
0.95	0.98281565 -18	0.99448630 -16	1.00555987 -14	1.01609464 -14
0.96	0.98298889 -16	0.99465075 -14	1.00571639 -14	1.01624395 -13
0.97	0.98316197 -17	0.99481506 -17	1.00587277 -15	1.01639313 -12
0.98	0.98333488 -17	0.99497920 -14	1.00602900 -13	1.01654219 -13
0.99	0.98350762 -18	0.99514320 -16	1.00618510 -13	1.01669112 -12
1.00	0.98368018 -16	0.99530704 -15	1.00634107 -15	1.01683993 -13

G-214

LOG (G) FOR S=1.5

G-214

P	I=16	I=17	I=18	I=19
1.00	0.98368018 -16	0.99530704 -15	1.00634107 -15	1.01683993 -13
1.01	0.98385258 -16	0.99547073 -15	1.00649689 -14	1.01698861 -13
1.02	0.98402482 -18	0.99563427 -15	1.00665257 -13	1.01713716 -12
1.03	0.98419688 -16	0.99579766 -15	1.00680812 -14	1.01728559 -13
1.04	0.98436878 -17	0.99596090 -16	1.00696353 -14	1.01743389 -13
1.05	0.98454051 -17	0.99612398 -15	1.00711880 -14	1.01758206 -12
1.06	0.98471207 -16	0.99628691 -14	1.00727393 -13	1.01773011 -12
1.07	0.98488347 -17	0.99644970 -16	1.00742893 -14	1.01787804 -13
1.08	0.98505470 -16	0.99661233 -15	1.00758379 -14	1.01802584 -13
1.09	0.98522577 -17	0.99677481 -14	1.00773851 -13	1.01817351 -12
1.10	0.98539667 -16	0.99693715 -16	1.00789310 -13	1.01832106 -12
1.11	0.98556741 -17	0.99709933 -14	1.00804756 -15	1.01846849 -12
1.12	0.98573798 -16	0.99726137 -15	1.00820187 -12	1.01861580 -13
1.13	0.98590839 -17	0.99742326 -15	1.00835606 -15	1.01876298 -13
1.14	0.98607863 -16	0.99758500 -15	1.00851010 -12	1.01891003 -11
1.15	0.98624871 -16	0.99774659 -15	1.00866402 -14	1.01905697 -13
1.16	0.98641863 -16	0.99790803 -14	1.00881780 -14	1.01920378 -12
1.17	0.98658839 -17	0.99806933 -15	1.00897144 -13	1.01935047 -12
1.18	0.98675798 -15	0.99823048 -14	1.00912495 -13	1.01949704 -13
1.19	0.98692742 -17	0.99839149 -16	1.00927833 -13	1.01964348 -12
1.20	0.98709669 -16	0.99855234 -13	1.00943158 -14	1.01978980 -11
1.21	0.98726580 -16	0.99871306 -16	1.00958469 -13	1.01993601 -13
1.22	0.98743475 -16	0.99887362 -14	1.00973767 -14	1.02008209 -12
1.23	0.98760354 -16	0.99903404 -14	1.00989051 -12	1.02022805 -12
1.24	0.98777217 -16	0.99919432 -15	1.01004323 -14	1.02037389 -13
1.25	0.98794064 -16	0.99935445 -14	1.01019581 -12	1.02051960 -11
1.26	0.98810895 -16	0.99951444 -15	1.01034827 -14	1.02066520 -12
1.27	0.98827710 -16	0.99967428 -14	1.01050052 -13	1.02081068 -12
1.28	0.98844509 -15	0.99983398 -14	1.01065278 -14	1.02095604 -12
1.29	0.98861293 -16	0.99999354 -15	1.01080483 -12	1.02110128 -13
1.30	0.98878061 -16	1.00015295 -14	1.01095676 -13	1.02124639 -11
1.31	0.98894813 -16	1.00031222 -14	1.01110856 -13	1.02139139 -11
1.32	0.98911549 -15	1.00047135 -15	1.01126023 -13	1.02153628 -13
1.33	0.98928270 -16	1.00063033 -14	1.01141177 -13	1.02168104 -12
1.34	0.98944975 -16	1.00078917 -13	1.01156318 -13	1.02182568 -11
1.35	0.98961664 -15	1.00094788 -15	1.01171446 -13	1.02197021 -13
1.36	0.98978338 -16	1.00110644 -14	1.01186561 -13	1.02211461 -11
1.37	0.98994996 -15	1.00126486 -15	1.01201663 -12	1.02225890 -11
1.38	0.99011639 -16	1.00142313 -13	1.01216753 -14	1.02240308 -13
1.39	0.99028266 -15	1.00158127 -14	1.01231829 -12	1.02254713 -11
1.40	0.99044878 -15	1.00173927 -14	1.01246893 -13	1.02269107 -12
1.41	0.99061475 -16	1.00189713 -14	1.01261944 -12	1.02283489 -11
1.42	0.99078056 -15	1.00205485 -14	1.01276983 -14	1.02297860 -13
1.43	0.99094622 -16	1.00221243 -14	1.01292008 -12	1.02312218 -10
1.44	0.99111172 -15	1.00236987 -14	1.01307021 -12	1.02326566 -13
1.45	0.99127707 -15	1.00252717 -14	1.01322022 -14	1.02340901 -11
1.46	0.99144227 -15	1.00268433 -13	1.01337009 -11	1.02355225 -11
1.47	0.99160732 -15	1.00284136 -15	1.01351985 -14	1.02369538 -12
1.48	0.99177222 -16	1.00299824 -13	1.01366947 -12	1.02383839 -12
1.49	0.99193696 -14	1.00315499 -13	1.01381897 -13	1.02398128 -11
1.50	0.99210156 -16	1.00331161 -15	1.01396834 -12	1.02412406 -12

LOG (G) FOR S=1.5

P	I=16	I=17	I=18	I=19
1.50	0.99210156 -16	1.00331161 -15	1.01396834 -12	1.02412406 -12
1.51	0.99226600 -15	1.00346808 -13	1.01411759 -12	1.02426672 -10
1.52	0.99243029 -15	1.00362442 -14	1.01426672 -13	1.02440928 -13
1.53	0.99259443 -14	1.00378062 -13	1.01441572 -13	1.02455171 -11
1.54	0.99275843 -16	1.00393669 -14	1.01456459 -12	1.02469403 -11
1.55	0.99292227 -15	1.00409262 -14	1.01471334 -12	1.02483624 -11
1.56	0.99308596 -14	1.00424841 -13	1.01486197 -12	1.02497834 -12
1.57	0.99324951 -15	1.00440407 -13	1.01501048 -13	1.02512032 -11
1.58	0.993341291 -16	1.00455960 -14	1.01515886 -13	1.02526219 -12
1.59	0.99357615 -13	1.00471499 -14	1.01530711 -11	1.02540394 -10
1.60	0.99373926 -16	1.00487024 -13	1.01545525 -13	1.02554559 -12
1.61	0.99390221 -15	1.00502536 -13	1.01560326 -12	1.02568712 -12
1.62	0.99406501 -14	1.00518035 -14	1.01575115 -12	1.02582853 -10
1.63	0.99422767 -14	1.00533520 -13	1.01589892 -13	1.02596984 -12
1.64	0.99439019 -16	1.00548992 -13	1.01604656 -11	1.02611103 -10
1.65	0.99455255 -14	1.00564451 -14	1.01619409 -13	1.02625212 -12
1.66	0.99471477 -15	1.00579896 -13	1.01634149 -12	1.02639309 -11
1.67	0.99487684 -14	1.00595328 -13	1.01648877 -12	1.02653395 -11
1.68	0.99503877 -14	1.00610747 -13	1.01663593 -12	1.02667470 -12
1.69	0.99520056 -15	1.00626153 -14	1.01678297 -12	1.02681533 -10
1.70	0.99536220 -15	1.00641545 -12	1.01692989 -12	1.02695586 -11
1.71	0.99552369 -14	1.00656925 -14	1.01707669 -12	1.02709628 -12
1.72	0.99568504 -14	1.00672291 -13	1.01722337 -13	1.02723658 -10
1.73	0.99584625 -15	1.00687644 -13	1.01736992 -11	1.02737678 -11
1.74	0.99600731 -14	1.00702984 -13	1.01751636 -12	1.02751687 -12
1.75	0.99616823 -15	1.00718311 -13	1.01766268 -12	1.02765684 -10
1.76	0.99632900 -13	1.00733625 -13	1.01780888 -12	1.02779671 -11
1.77	0.99648964 -15	1.00748926 -13	1.01795496 -11	1.02793647 -11
1.78	0.99665013 -14	1.00764214 -13	1.01810093 -13	1.02807612 -11
1.79	0.99681048 -15	1.00779489 -13	1.01824677 -11	1.02821566 -11
1.80	0.99697068 -13	1.00794751 -13	1.01839250 -12	1.02835509 -10
1.81	0.99713075 -15	1.00810000 -13	1.01853811 -12	1.02849442 -12
1.82	0.99729067 -13	1.00825236 -12	1.01868360 -12	1.02863363 -10
1.83	0.99745046 -15	1.00840460 -14	1.01882897 -12	1.02877274 -11
1.84	0.99761010 -14	1.00855670 -12	1.01897422 -11	1.02891174 -11
1.85	0.99776960 -14	1.00870868 -13	1.019111936 -12	1.02905063 -11
1.86	0.99792896 -14	1.00886053 -13	1.01926438 -11	1.02918941 -10
1.87	0.99808818 -13	1.00901225 -12	1.01940929 -12	1.02932809 -11
1.88	0.99824727 -15	1.00916385 -13	1.01955408 -12	1.02946666 -11
1.89	0.99840621 -14	1.00931532 -13	1.01969875 -12	1.02960512 -10
1.90	0.99856501 -13	1.00946666 -12	1.01984330 -11	1.02974348 -11
1.91	0.99872368 -15	1.00961788 -14	1.01998774 -11	1.02988173 -11
1.92	0.99888220 -13	1.00976896 -11	1.02013207 -12	1.03001987 -10
1.93	0.99904059 -14	1.00991993 -13	1.02027628 -12	1.03015791 -11
1.94	0.99919884 -13	1.01007077 -13	1.02042037 -11	1.03029584 -10
1.95	0.99935696 -15	1.01022148 -13	1.02056435 -12	1.03043367 -11
1.96	0.99951493 -13	1.01037206 -11	1.02070821 -11	1.03057139 -11
1.97	0.99967277 -14	1.01052253 -14	1.02085196 -11	1.03070900 -10
1.98	0.99983047 -13	1.01067286 -12	1.02099560 -12	1.03084651 -10
1.99	0.99998804 -14	1.01082307 -12	1.02113912 -12	1.03098392 -11
2.00	1.00014547 -14	1.01097316 -12	1.02128252 -10	1.03112122 -11

G-214

LOG (G) FOR S=1.5

P	I=16	I=17	I=18	I=19
G-214				
2.00	1.00014547 -14	1.01097316 -12	1.02128252 -10	1.03112122 -11
2.01	1.00030276 -13	1.01112313 -13	1.02142582 -12	1.03125841 -10
2.02	1.00045992 -14	1.01127297 -13	1.02156900 -12	1.03139550 -10
2.03	1.00061694 -13	1.01142268 -11	1.02171206 -10	1.03153249 -11
2.04	1.00077383 -14	1.01157228 -13	1.02185502 -12	1.03166937 -10
2.05	1.00093058 -13	1.01172175 -13	1.02199786 -12	1.03180615 -10
2.06	1.00108720 -14	1.01187109 -11	1.02214058 -10	1.03194283 -11
2.07	1.00124368 -13	1.01202032 -13	1.02228320 -12	1.03207940 -10
2.08	1.00140003 -14	1.01216942 -12	1.02242570 -11	1.03221587 -11
2.09	1.00155624 -12	1.01231840 -12	1.02256809 -11	1.03235223 -9
2.10	1.00171233 -15	1.01246726 -13	1.02271037 -11	1.03248850 -11
2.11	1.00186827 -12	1.01261599 -11	1.02285254 -12	1.03262466 -11
2.12	1.00202409 -14	1.01276461 -13	1.02299459 -10	1.03276071 -9
2.13	1.00217977 -13	1.01291310 -12	1.02313654 -12	1.03289667 -11
2.14	1.00233532 -13	1.01306147 -12	1.02327837 -11	1.03303252 -10
2.15	1.00249074 -14	1.01320972 -12	1.02342009 -10	1.03316827 -10
2.16	1.00264602 -12	1.01335785 -12	1.02356171 -12	1.03330392 -11
2.17	1.00280118 -14	1.01350586 -12	1.02370321 -11	1.03343946 -9
2.18	1.00295620 -13	1.01365375 -12	1.02384460 -11	1.03357491 -11
2.19	1.00311109 -13	1.01380152 -12	1.02398588 -11	1.03371025 -9
2.20	1.00326585 -13	1.01394917 -12	1.02412705 -11	1.03384550 -11
2.21	1.00342048 -13	1.01409670 -12	1.02426811 -10	1.03398064 -10
2.22	1.00357498 -13	1.01424411 -11	1.02440907 -12	1.03411568 -10
2.23	1.00372935 -13	1.01439141 -13	1.02454991 -11	1.03425062 -10
2.24	1.00388359 -14	1.01453858 -12	1.02469064 -10	1.03438546 -10
2.25	1.00403769 -12	1.01468563 -11	1.02483127 -11	1.03452020 -10
2.26	1.00419167 -13	1.01483257 -12	1.02497179 -12	1.03465484 -10
2.27	1.00434552 -13	1.01497939 -12	1.02511219 -10	1.03478938 -10
2.28	1.00449924 -12	1.01512609 -12	1.02525249 -11	1.03492382 -11
2.29	1.00465284 -14	1.01527267 -11	1.02539268 -10	1.03505815 -8
2.30	1.00480630 -12	1.01541914 -12	1.02553277 -12	1.03519240 -11
2.31	1.00495964 -14	1.01556549 -12	1.02567274 -10	1.03532654 -10
2.32	1.00511284 -12	1.01571172 -12	1.02581261 -11	1.03546058 -10
2.33	1.00526592 -13	1.01585783 -11	1.02595237 -10	1.03559452 -9
2.34	1.00541887 -12	1.01600383 -12	1.02609203 -12	1.03572837 -11
2.35	1.00557170 -13	1.01614971 -12	1.02623157 -10	1.03586211 -9
2.36	1.00572440 -13	1.01629547 -11	1.02637101 -10	1.03599576 -10
2.37	1.00587697 -13	1.01644112 -12	1.02651035 -11	1.03612931 -10
2.38	1.00602941 -12	1.01658665 -11	1.02664958 -11	1.03626276 -10
2.39	1.00618173 -13	1.01673207 -12	1.02678870 -11	1.03639611 -9
2.40	1.00633392 -12	1.01687737 -11	1.02692771 -10	1.03652937 -11
2.41	1.00648599 -13	1.01702256 -12	1.02706662 -11	1.03666252 -9
2.42	1.00663793 -12	1.01716763 -11	1.02720542 -10	1.03679558 -9
2.43	1.00678975 -13	1.01731259 -12	1.02734412 -11	1.03692855 -11
2.44	1.00694144 -13	1.01745743 -11	1.02748271 -10	1.03706141 -9
2.45	1.00709300 -12	1.01760216 -12	1.02762120 -11	1.03719418 -10
2.46	1.00724444 -12	1.01774677 -11	1.02775958 -10	1.03732685 -9
2.47	1.00739576 -13	1.01789127 -11	1.02789786 -10	1.03745943 -10
2.48	1.00754695 -12	1.01803566 -12	1.02803604 -12	1.03759191 -10
2.49	1.00769802 -13	1.01817993 -11	1.02817410 -9	1.03772429 -9
2.50	1.00784896 0	1.01832409 0	1.02831207 0	1.03785658 0

LOG (G) FOR S=1.5

P	I=20	I=21	I=22	I=23
0.	1.01200986 0	1.02222903 0	1.03198886 0	1.04132889 0
0.01	1.01216489 -14	1.02237701 -12	1.03213042 -12	1.04146455 -11
0.02	1.01231978 -14	1.02252487 -13	1.03227186 -12	1.04160010 -11
0.03	1.01247453 -14	1.02267260 -13	1.03241318 -12	1.04173554 -10
0.04	1.01262914 -15	1.02282020 -13	1.03255438 -12	1.04187088 -12
0.05	1.01278360 -14	1.02296767 -13	1.03269546 -12	1.04200610 -11
0.06	1.01293792 -14	1.02311501 -13	1.03283642 -12	1.04214121 -10
0.07	1.01309210 -14	1.02326222 -13	1.03297726 -11	1.04227622 -11
0.08	1.01324614 -15	1.02340930 -13	1.03311799 -12	1.04241112 -12
0.09	1.01340003 -13	1.02355625 -12	1.03325860 -12	1.04254590 -10
0.10	1.01355379 -14	1.02370308 -14	1.03339909 -12	1.04268058 -11
0.11	1.01370741 -15	1.02384977 -12	1.03353946 -12	1.04281515 -10
0.12	1.01386088 -13	1.02399634 -13	1.03367971 -11	1.04294962 -12
0.13	1.01401422 -14	1.02414278 -13	1.03381985 -12	1.04308397 -10
0.14	1.01416742 -14	1.02428909 -12	1.03395987 -11	1.04321822 -11
0.15	1.01432048 -14	1.02443528 -13	1.03409978 -12	1.04335236 -10
0.16	1.01447340 -14	1.02458134 -13	1.03423957 -12	1.04348640 -11
0.17	1.01462618 -14	1.02472727 -12	1.03437924 -11	1.04362033 -11
0.18	1.01477882 -13	1.02487308 -13	1.03451880 -12	1.04375415 -11
0.19	1.01493133 -14	1.02501876 -12	1.03465824 -11	1.04388786 -10
0.20	1.01508370 -14	1.02516432 -13	1.03479757 -12	1.04402147 -10
0.21	1.01523593 -14	1.02530975 -13	1.03493678 -12	1.04415498 -12
0.22	1.01538802 -13	1.02545505 -11	1.03507587 -10	1.04428837 -10
0.23	1.01553998 -14	1.02560024 -14	1.03521486 -12	1.04442166 -10
0.24	1.01569180 -13	1.02574529 -12	1.03535373 -12	1.04455485 -11
0.25	1.01584349 -14	1.02589022 -12	1.03549248 -11	1.04468793 -10
0.26	1.01599504 -14	1.02603503 -12	1.03563112 -11	1.04482091 -11
0.27	1.01614645 -13	1.02617972 -13	1.03576965 -12	1.04495378 -10
0.28	1.01629773 -13	1.02632428 -13	1.03590806 -11	1.04508655 -11
0.29	1.01644888 -14	1.02646871 -11	1.03604636 -11	1.04521921 -10
0.30	1.01659989 -13	1.02661303 -13	1.03618455 -12	1.04535177 -10
0.31	1.01675077 -14	1.02675722 -12	1.03632262 -11	1.04548423 -11
0.32	1.01690151 -13	1.02690129 -12	1.03646058 -11	1.04561658 -10
0.33	1.01705212 -13	1.02704524 -13	1.03659843 -11	1.04574883 -11
0.34	1.01720260 -14	1.02718906 -11	1.03673617 -11	1.04588097 -10
0.35	1.01735294 -13	1.02733277 -13	1.03687380 -12	1.04601301 -10
0.36	1.01750315 -13	1.02747635 -12	1.03701131 -10	1.04614495 -10
0.37	1.01765323 -13	1.02761981 -12	1.03714872 -12	1.04627679 -10
0.38	1.01780318 -14	1.02776315 -12	1.03728601 -11	1.04640853 -11
0.39	1.01795299 -12	1.02790637 -12	1.03742319 -11	1.04654016 -10
0.40	1.01810268 -14	1.02804947 -12	1.03756026 -11	1.04667169 -10
0.41	1.01825223 -13	1.02819245 -12	1.03769722 -11	1.04680312 -11
0.42	1.01840165 -13	1.02833531 -12	1.03783407 -11	1.04693444 -9
0.43	1.01855094 -13	1.02847805 -12	1.03797081 -11	1.04706567 -11
0.44	1.01870010 -13	1.02862067 -12	1.03810744 -11	1.04719679 -10
0.45	1.01884913 -13	1.02876317 -12	1.03824396 -11	1.04732781 -9
0.46	1.01899803 -13	1.02890555 -11	1.03838037 -10	1.04745874 -11
0.47	1.01914680 -12	1.02904782 -13	1.03851668 -12	1.04758956 -10
0.48	1.01929545 -14	1.02918996 -11	1.03865287 -10	1.04772028 -10
0.49	1.01944396 -13	1.02933199 -12	1.03878896 -12	1.04785090 -10
0.50	1.01959234 -12	1.02947390 -12	1.03892493 -10	1.04798142 -10

G-214

LOG (G) FOR S=1.5

G-214

P	I=20	I=21	I=22	I=23
0.50	1.01959234 -12	1.02947390 -12	1.03892493 -10	1.04798142 -10
0.51	1.01974060 -13	1.02961569 -11	1.03906080 -11	1.04811184 -10
0.52	1.01988873 -13	1.02975737 -13	1.03919656 -11	1.04824216 -10
0.53	1.02003673 -13	1.02989892 -11	1.03933221 -10	1.04837238 -10
0.54	1.02018460 -13	1.03004036 -11	1.03946776 -11	1.04850250 -9
0.55	1.02033234 -12	1.03018169 -13	1.03960320 -11	1.04863253 -11
0.56	1.02047996 -13	1.03032289 -11	1.03973853 -11	1.04876245 -9
0.57	1.02062745 -12	1.03046398 -11	1.03987375 -10	1.04889228 -11
0.58	1.02077482 -14	1.03060496 -12	1.04000887 -11	1.04902200 -9
0.59	1.02092205 -11	1.03074582 -12	1.04014388 -11	1.04915163 -10
0.60	1.02106917 -14	1.03088656 -11	1.04027878 -10	1.04928116 -10
0.61	1.02121615 -12	1.03102719 -12	1.04041358 -11	1.04941059 -9
0.62	1.02136301 -12	1.03116770 -11	1.04054827 -11	1.04953993 -11
0.63	1.02150975 -13	1.03130810 -12	1.04068285 -10	1.04966916 -9
0.64	1.02165636 -12	1.03144838 -11	1.04081733 -10	1.04979830 -10
0.65	1.02180285 -13	1.03158855 -11	1.04095171 -11	1.04992734 -9
0.66	1.02194921 -12	1.03172861 -12	1.04108598 -11	1.05005629 -11
0.67	1.02209545 -13	1.03186855 -12	1.04122014 -10	1.05018513 -9
0.68	1.02224156 -12	1.03200837 -10	1.04135420 -10	1.05031388 -9
0.69	1.02238755 -12	1.03214809 -12	1.04148816 -11	1.05044254 -10
0.70	1.02253342 -13	1.03228769 -12	1.04162201 -10	1.05057110 -10
0.71	1.02267916 -12	1.03242717 -10	1.04175576 -11	1.05069956 -10
0.72	1.02282478 -12	1.03256655 -12	1.04188940 -10	1.05082792 -9
0.73	1.02297028 -12	1.03270581 -11	1.04202294 -11	1.05095619 -10
0.74	1.02311566 -13	1.03284496 -11	1.04215637 -9	1.05108436 -9
0.75	1.02326091 -12	1.03298400 -12	1.04228971 -11	1.05121244 -9
0.76	1.02340604 -12	1.03312292 -10	1.04242294 -11	1.05134043 -11
0.77	1.02355105 -12	1.03326174 -12	1.04255606 -9	1.05146831 -8
0.78	1.02369594 -12	1.03340044 -11	1.04268909 -11	1.05159611 -11
0.79	1.02384071 -12	1.03353903 -11	1.04282201 -11	1.05172380 -8
0.80	1.02398536 -13	1.03367751 -11	1.04295482 -9	1.05185141 -11
0.81	1.02412988 -11	1.03381588 -11	1.04308754 -10	1.05197891 -8
0.82	1.02427429 -13	1.03395414 -11	1.04322016 -11	1.05210633 -10
0.83	1.02441857 -11	1.03409229 -12	1.04335267 -10	1.05223365 -10
0.84	1.02456274 -13	1.03423032 -10	1.04348508 -10	1.05236087 -8
0.85	1.02470678 -11	1.03436825 -11	1.04361739 -10	1.05248801 -11
0.86	1.02485071 -12	1.03450607 -11	1.04374960 -11	1.05261504 -8
0.87	1.02499452 -12	1.03464378 -11	1.04388170 -9	1.05274199 -10
0.88	1.02513821 -12	1.03478138 -11	1.04401371 -10	1.05286884 -9
0.89	1.02528178 -12	1.03491887 -11	1.04414562 -11	1.05299560 -10
0.90	1.02542523 -12	1.03505625 -11	1.04427742 -9	1.05312226 -8
0.91	1.02556856 -12	1.03519352 -11	1.04440913 -11	1.05324884 -10
0.92	1.02571177 -11	1.03533068 -10	1.04454073 -9	1.05337532 -10
0.93	1.02585487 -12	1.03546774 -11	1.04467224 -11	1.05350170 -8
0.94	1.02599785 -12	1.03560469 -11	1.04480364 -9	1.05362800 -10
0.95	1.02614071 -11	1.03574153 -11	1.04493495 -11	1.05375420 -9
0.96	1.02628346 -12	1.03587826 -11	1.04506615 -9	1.05388031 -9
0.97	1.02642609 -12	1.03601488 -10	1.04519726 -10	1.05400633 -9
0.98	1.02656860 -12	1.03615140 -11	1.04532827 -10	1.05413226 -9
0.99	1.02671099 -11	1.03628781 -11	1.04545918 -10	1.05425810 -10
1.00	1.02685327 -12	1.03642411 -10	1.04558999 -10	1.05438384 -9

LOG (G) FOR S=1.5

P	I=20	I=21	I=22	I=23	G-214
1.00	1.02685327 -12	1.03642411 -10	1.04558999 -10	1.05438384 -9	
1.01	1.02699543 -11	1.03656031 -11	1.04572070 -10	1.05450949 -8	
1.02	1.02713748 -12	1.03669640 -11	1.04585131 -9	1.05463506 -10	
1.03	1.02727941 -11	1.03683238 -10	1.04598183 -10	1.05476053 -9	
1.04	1.02742123 -12	1.03696826 -11	1.04611225 -10	1.05488591 -9	
1.05	1.02756293 -11	1.03710403 -10	1.04624257 -10	1.05501120 -9	
1.06	1.02770452 -12	1.03723970 -11	1.04637279 -10	1.05513640 -9	
1.07	1.02784599 -11	1.03737526 -11	1.04650291 -9	1.05526151 -9	
1.08	1.02798735 -12	1.03751071 -10	1.04663294 -10	1.05538653 -9	
1.09	1.02812859 -11	1.03764606 -10	1.04676287 -9	1.05551146 -9	
1.10	1.02826972 -11	1.03778131 -11	1.04689271 -11	1.05563630 -9	
1.11	1.02841074 -12	1.03791645 -10	1.04702244 -9	1.05576105 -9	
1.12	1.02855164 -11	1.03805149 -11	1.04715208 -9	1.05588571 -9	
1.13	1.02869243 -11	1.03818642 -10	1.04728163 -11	1.05601028 -9	
1.14	1.02883311 -12	1.03832125 -11	1.04741107 -8	1.05613476 -9	
1.15	1.02897367 -11	1.03845597 -10	1.04754043 -11	1.05625915 -8	
1.16	1.02911412 -11	1.03859059 -10	1.04766968 -9	1.05638346 -10	
1.17	1.02925446 -12	1.03872511 -11	1.04779884 -9	1.05650767 -8	
1.18	1.02939468 -10	1.03885952 -10	1.04792791 -10	1.05663180 -9	
1.19	1.02953480 -12	1.03899383 -10	1.04805688 -10	1.05675584 -9	
1.20	1.02967480 -11	1.03912804 -11	1.04818575 -9	1.05687979 -9	
1.21	1.02981469 -11	1.03926214 -10	1.04831453 -9	1.05700365 -8	
1.22	1.02995447 -11	1.03939614 -10	1.04844322 -11	1.05712743 -10	
1.23	1.03009414 -11	1.03953004 -10	1.04857180 -8	1.05725111 -8	
1.24	1.03023370 -12	1.03966384 -10	1.04870030 -10	1.05737471 -9	
1.25	1.03037314 -10	1.03979754 -11	1.04882870 -9	1.05749822 -8	
1.26	1.03051248 -11	1.03993113 -10	1.04895701 -10	1.05762165 -9	
1.27	1.03065171 -12	1.04006462 -10	1.04908522 -9	1.05774499 -9	
1.28	1.03079082 -10	1.04019801 -10	1.04921334 -9	1.05786824 -9	
1.29	1.03092983 -11	1.04033130 -10	1.04934137 -10	1.05799140 -8	
1.30	1.03106873 -12	1.04046449 -11	1.04946930 -9	1.05811448 -10	
1.31	1.03120751 -10	1.04059757 -9	1.04959714 -10	1.05823746 -7	
1.32	1.03134619 -11	1.04073056 -10	1.04972488 -9	1.05836037 -9	
1.33	1.03148476 -11	1.04086345 -11	1.04985253 -9	1.05848319 -9	
1.34	1.03162322 -11	1.04099623 -9	1.04998009 -9	1.05860592 -9	
1.35	1.03176157 -11	1.04112892 -11	1.05010756 -10	1.05872856 -8	
1.36	1.03189981 -10	1.04126150 -9	1.05023493 -8	1.05885112 -9	
1.37	1.03203795 -12	1.04139399 -11	1.05036222 -11	1.05897359 -8	
1.38	1.03217597 -10	1.04152637 -9	1.05048940 -8	1.05909598 -9	
1.39	1.03231389 -11	1.04165866 -10	1.05061650 -9	1.05921828 -8	
1.40	1.03245170 -10	1.04179085 -11	1.05074351 -10	1.05934050 -9	
1.41	1.03258941 -12	1.04192293 -9	1.05087042 -9	1.05946263 -8	
1.42	1.03272700 -10	1.04205492 -10	1.05099724 -9	1.05958468 -9	
1.43	1.03286449 -11	1.04218681 -10	1.05112397 -9	1.05970664 -8	
1.44	1.03300187 -10	1.04231860 -9	1.05125061 -9	1.05982852 -9	
1.45	1.03313915 -11	1.04245030 -11	1.05137716 -9	1.05995031 -8	
1.46	1.03327632 -11	1.04258189 -9	1.05150362 -9	1.06007202 -9	
1.47	1.03341338 -10	1.04271339 -10	1.05162999 -10	1.06019364 -8	
1.48	1.03355034 -11	1.04284479 -10	1.05175626 -8	1.06031518 -8	
1.49	1.03368719 -10	1.04297609 -10	1.05188245 -10	1.06043664 -9	
1.50	1.03382394 -11	1.04310729 -9	1.05200854 -8	1.06055801 -8	

LOG (G) FOR S=1.5

P	I=20	I=21	I=22	I=23
1.50	1.03382394 -11	1.04310729 -9	1.05200854 -8	1.06055801 -8
1.51	1.03396058 -11	1.04323840 -10	1.05213455 -10	1.06067930 -9
1.52	1.03409711 -10	1.04336941 -10	1.05226046 -8	1.06080050 -8
1.53	1.03423354 -10	1.04350032 -10	1.05238629 -9	1.06092162 -8
1.54	1.03436987 -11	1.04363113 -9	1.05251203 -10	1.06104266 -9
1.55	1.03450609 -11	1.04376185 -10	1.05263767 -8	1.06116361 -7
1.56	1.03464220 -10	1.04389247 -9	1.05276323 -9	1.06128449 -10
1.57	1.03477821 -10	1.04402300 -10	1.05288870 -10	1.06140527 -7
1.58	1.03491412 -11	1.04415343 -10	1.05301407 -8	1.06152598 -9
1.59	1.03504992 -10	1.04428376 -9	1.05313936 -9	1.06164660 -8
1.60	1.03518562 -10	1.04441400 -10	1.05326456 -8	1.06176714 -8
1.61	1.03532122 -11	1.04454414 -9	1.05338968 -10	1.06188760 -8
1.62	1.03545671 -10	1.04467419 -10	1.05351470 -9	1.06200798 -9
1.63	1.03559210 -10	1.04480414 -10	1.05363963 -8	1.06212827 -8
1.64	1.03572739 -11	1.04493399 -9	1.05376448 -9	1.06224848 -8
1.65	1.03586257 -10	1.04506375 -9	1.05388924 -9	1.06236861 -8
1.66	1.03599765 -10	1.04519342 -10	1.05401391 -9	1.06248866 -8
1.67	1.03613263 -10	1.04532299 -9	1.05413849 -8	1.06260863 -9
1.68	1.03626751 -11	1.04545247 -10	1.05426299 -10	1.06272851 -8
1.69	1.03640228 -10	1.04558185 -9	1.05438739 -7	1.06284831 -7
1.70	1.03653695 -10	1.04571114 -10	1.05451172 -10	1.06296804 -9
1.71	1.03667152 -10	1.04584033 -9	1.05463595 -9	1.06308768 -8
1.72	1.03680599 -10	1.04596943 -9	1.05476009 -8	1.06320724 -8
1.73	1.03694036 -11	1.04609844 -10	1.05488415 -8	1.06332672 -8
1.74	1.03707462 -9	1.04622735 -9	1.05500813 -10	1.06344612 -9
1.75	1.03720879 -11	1.04635617 -9	1.05513201 -8	1.06356543 -7
1.76	1.03734285 -9	1.04648490 -10	1.05525581 -9	1.06368467 -8
1.77	1.03747682 -11	1.04661353 -9	1.05537952 -8	1.06380383 -8
1.78	1.03761068 -10	1.04674207 -9	1.05550315 -9	1.06392291 -8
1.79	1.03774444 -9	1.04687052 -10	1.05562669 -8	1.06404191 -9
1.80	1.03787811 -11	1.04699887 -8	1.05575015 -9	1.06416082 -7
1.81	1.03801167 -10	1.04712714 -10	1.05587352 -9	1.06427966 -8
1.82	1.03814513 -10	1.04725531 -10	1.05599680 -8	1.06439842 -8
1.83	1.03827849 -9	1.04738338 -8	1.05612000 -9	1.06451710 -8
1.84	1.03841176 -11	1.04751137 -10	1.05624311 -8	1.06463570 -8
1.85	1.03854492 -9	1.04763926 -8	1.05636614 -9	1.06475422 -8
1.86	1.03867799 -11	1.04776707 -10	1.05648908 -8	1.06487266 -8
1.87	1.03881095 -9	1.04789478 -9	1.05661194 -9	1.06499102 -8
1.88	1.03894382 -10	1.04802240 -10	1.05673471 -8	1.06510930 -8
1.89	1.03907659 -10	1.04814992 -8	1.05685740 -9	1.06522750 -7
1.90	1.03920926 -9	1.04827736 -9	1.05698000 -8	1.06534563 -8
1.91	1.03934184 -11	1.04840471 -10	1.05710252 -8	1.06546368 -8
1.92	1.03947431 -9	1.04853196 -8	1.05722496 -9	1.06558165 -8
1.93	1.03960669 -10	1.04865913 -10	1.05734731 -9	1.06569954 -8
1.94	1.03973897 -10	1.04878620 -8	1.05746957 -7	1.06581735 -8
1.95	1.03987115 -10	1.04891319 -10	1.05759176 -9	1.06593508 -7
1.96	1.04000323 -9	1.04904008 -8	1.05771386 -9	1.06605274 -9
1.97	1.04013522 -10	1.04916689 -10	1.05783587 -8	1.06617031 -6
1.98	1.04026711 -10	1.04929360 -9	1.05795780 -8	1.06628782 -9
1.99	1.04039890 -9	1.04942022 -8	1.05807965 -8	1.06640524 -8
2.00	1.04053060 -10	1.04954676 -9	1.05820142 -9	1.06652258 -7

LOG (G) FOR S=1.5

P	I=20	I=21	I=22	I=23	G-214
2.00	1.04053060 -10	1.04954676 -9	1.05820142 -9	1.06652258 -7	
2.01	1.04066220 -10	1.04967321 -10	1.05832310 -8	1.06663985 -8	
2.02	1.04079370 -9	1.04979956 -8	1.05844470 -8	1.06675704 -7	
2.03	1.04092511 -10	1.04992583 -9	1.05856622 -9	1.06687416 -9	
2.04	1.04105642 -10	1.05005201 -9	1.05868765 -7	1.06699119 -7	
2.05	1.04118763 -9	1.05017810 -9	1.05880901 -9	1.06710815 -7	
2.06	1.04131875 -10	1.05030410 -9	1.05893028 -9	1.06722504 -9	
2.07	1.04144977 -9	1.05043001 -9	1.05905146 -7	1.06734184 -7	
2.08	1.04158070 -9	1.05055583 -8	1.05917257 -9	1.06745857 -7	
2.09	1.04171154 -11	1.05068157 -9	1.05929359 -8	1.06757523 -9	
2.10	1.04184227 -8	1.05080722 -9	1.05941453 -8	1.06769180 -6	
2.11	1.04197292 -10	1.05093278 -9	1.05953539 -8	1.06780831 -9	
2.12	1.04210347 -10	1.05105825 -9	1.05965617 -8	1.06792473 -7	
2.13	1.04223392 -9	1.05118363 -8	1.05977687 -9	1.06804108 -8	
2.14	1.04236428 -10	1.05130893 -9	1.05989748 -7	1.06815735 -7	
2.15	1.04249454 -9	1.05143414 -9	1.06001802 -9	1.06827355 -7	
2.16	1.04262471 -9	1.05155926 -8	1.06013847 -8	1.06838968 -9	
2.17	1.04275479 -10	1.05168430 -10	1.06025884 -8	1.06850572 -7	
2.18	1.04288477 -9	1.05180924 -8	1.06037913 -8	1.06862169 -7	
2.19	1.04301466 -9	1.05193410 -8	1.06049934 -7	1.06873759 -8	
2.20	1.04314446 -10	1.05205888 -9	1.06061948 -10	1.06885341 -7	
2.21	1.04327416 -9	1.05218357 -9	1.06073952 -7	1.06896916 -8	
2.22	1.04340377 -9	1.05230817 -9	1.06085949 -8	1.06908483 -7	
2.23	1.04353329 -10	1.05243268 -8	1.06097938 -8	1.06920043 -8	
2.24	1.04366271 -9	1.05255711 -8	1.06109919 -8	1.06931595 -7	
2.25	1.04379204 -9	1.05268146 -10	1.06121892 -8	1.06943140 -8	
2.26	1.04392128 -9	1.05280571 -7	1.06133857 -8	1.06954677 -7	
2.27	1.04405043 -10	1.05292989 -10	1.06145814 -8	1.06966207 -8	
2.28	1.04417948 -9	1.05305397 -8	1.06157763 -8	1.06977729 -7	
2.29	1.04430844 -9	1.05317797 -8	1.06169704 -8	1.06989244 -7	
2.30	1.04443731 -9	1.05330189 -9	1.06181637 -8	1.07000752 -8	
2.31	1.04456609 -10	1.05342572 -9	1.06193562 -7	1.07012252 -7	
2.32	1.04469477 -8	1.05354946 -8	1.06205480 -9	1.07023745 -7	
2.33	1.04482337 -10	1.05367312 -8	1.06217389 -7	1.07035231 -8	
2.34	1.04495187 -9	1.05379670 -9	1.06229291 -9	1.07046709 -7	
2.35	1.04508028 -8	1.05392019 -8	1.06241184 -7	1.07058180 -8	
2.36	1.04520861 -10	1.05404360 -9	1.06253070 -8	1.07069643 -6	
2.37	1.04533684 -10	1.05416692 -8	1.06264948 -8	1.07081100 -8	
2.38	1.04546497 -8	1.05429016 -9	1.06276818 -8	1.07092549 -8	
2.39	1.04559302 -9	1.05441331 -8	1.06288680 -7	1.07103990 -7	
2.40	1.04572098 -9	1.05453638 -8	1.06300535 -8	1.07115424 -6	
2.41	1.04584885 -9	1.05465937 -9	1.06312382 -9	1.07126852 -9	
2.42	1.04597663 -10	1.05478227 -8	1.06324220 -6	1.07138271 -6	
2.43	1.04610431 -8	1.05490509 -8	1.06336052 -9	1.07149684 -8	
2.44	1.04623191 -9	1.05502783 -9	1.06347875 -7	1.07161089 -7	
2.45	1.04635942 -9	1.05515048 -8	1.06359691 -9	1.07172487 -7	
2.46	1.04648684 -9	1.05527305 -9	1.06371498 -6	1.07183878 -7	
2.47	1.04661417 -9	1.05539553 -7	1.06383299 -9	1.07195262 -8	
2.48	1.04674141 -9	1.05551794 -9	1.06395091 -7	1.07206638 -7	
2.49	1.04686856 -9	1.05564026 -9	1.06406876 -8	1.07218007 -7	
2.50	1.04699562 0	1.05576249 0	1.06418653 0	1.07229369 0	

LOG (G) FOR S=1.5

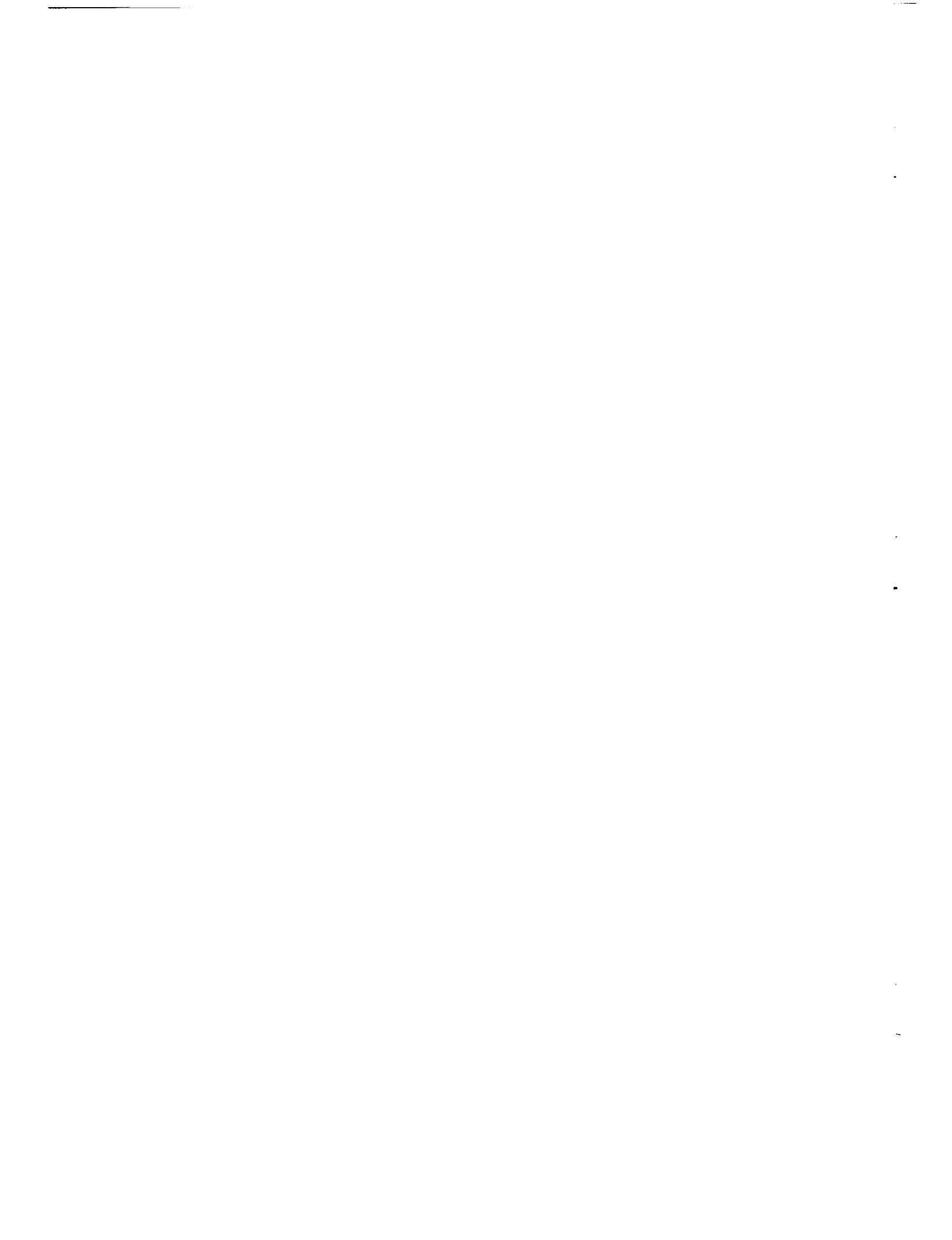
	P	I=24	P	I=24	P	I=24
G-214	0.	1.05028373 0	0.50	1.05667501 -10	1.00	1.06283475 -9
	0.01	1.05041397 -10	0.51	1.05680040 -9	1.01	1.06295572 -8
	0.02	1.05054411 -11	0.52	1.05692570 -9	1.02	1.06307661 -9
	0.03	1.05067414 -10	0.53	1.05705091 -9	1.03	1.06319741 -8
	0.04	1.05080407 -9	0.54	1.05717603 -10	1.04	1.06331813 -8
	0.05	1.05093391 -11	0.55	1.05730105 -8	1.05	1.06343877 -9
	0.06	1.05106364 -10	0.56	1.05742599 -10	1.06	1.0635932 -9
	0.07	1.05119327 -10	0.57	1.05755083 -9	1.07	1.06367978 -7
	0.08	1.05132280 -10	0.58	1.05767558 -9	1.08	1.06380017 -9
	0.09	1.05145223 -10	0.59	1.05780024 -9	1.09	1.06392047 -8
	0.10	1.05158156 -10	0.60	1.05792481 -10	1.10	1.06404069 -9
	0.11	1.05171079 -10	0.61	1.05804928 -8	1.11	1.06416082 -8
	0.12	1.05183992 -9	0.62	1.05817367 -9	1.12	1.06428087 -8
	0.13	1.05196896 -11	0.63	1.05829797 -10	1.13	1.06440084 -9
	0.14	1.05209789 -10	0.64	1.05842217 -8	1.14	1.06452072 -8
	0.15	1.05222672 -9	0.65	1.05854629 -9	1.15	1.06464052 -8
	0.16	1.05235546 -10	0.66	1.05867032 -10	1.16	1.06476024 -8
	0.17	1.05248410 -10	0.67	1.05879425 -8	1.17	1.06487988 -9
	0.18	1.05261264 -10	0.68	1.05891810 -10	1.18	1.06499943 -7
	0.19	1.05274108 -10	0.69	1.05904185 -8	1.19	1.06511891 -9
	0.20	1.05286942 -10	0.70	1.05916552 -9	1.20	1.06523830 -9
	0.21	1.05299766 -9	0.71	1.05928910 -9	1.21	1.06535760 -7
	0.22	1.05312581 -10	0.72	1.05941259 -9	1.22	1.06547683 -8
	0.23	1.05325386 -10	0.73	1.05953599 -9	1.23	1.06559598 -9
	0.24	1.05338181 -10	0.74	1.05965930 -9	1.24	1.06571504 -8
	0.25	1.05350966 -9	0.75	1.05978252 -8	1.25	1.06583402 -8
	0.26	1.05363742 -10	0.76	1.05990566 -10	1.26	1.06595292 -8
	0.27	1.05376508 -9	0.77	1.06002870 -8	1.27	1.06607174 -8
	0.28	1.05389265 -10	0.78	1.06015166 -9	1.28	1.06619048 -8
	0.29	1.05402012 -10	0.79	1.06027453 -9	1.29	1.06630914 -8
	0.30	1.05414749 -10	0.80	1.06039731 -8	1.30	1.06642772 -9
	0.31	1.05427476 -9	0.81	1.06052001 -10	1.31	1.06654621 -7
	0.32	1.05440194 -9	0.82	1.06064261 -8	1.32	1.06666463 -8
	0.33	1.05452903 -10	0.83	1.06076513 -8	1.33	1.06678297 -9
	0.34	1.05465602 -10	0.84	1.06088757 -10	1.34	1.06690122 -7
	0.35	1.05478291 -9	0.85	1.06100991 -8	1.35	1.06701940 -9
	0.36	1.05490971 -9	0.86	1.06113217 -9	1.36	1.06713749 -7
	0.37	1.05503642 -11	0.87	1.06125434 -8	1.37	1.06725551 -8
	0.38	1.05516302 -8	0.88	1.06137643 -9	1.38	1.06737345 -9
	0.39	1.05528954 -10	0.89	1.06149843 -9	1.39	1.06749130 -7
	0.40	1.05541596 -9	0.90	1.06162034 -9	1.40	1.06760908 -8
	0.41	1.05554229 -10	0.91	1.06174216 -8	1.41	1.06772678 -8
	0.42	1.05566852 -9	0.92	1.06186390 -8	1.42	1.06784440 -8
	0.43	1.05579466 -10	0.93	1.06198556 -9	1.43	1.06796194 -8
	0.44	1.05592070 -9	0.94	1.06210713 -9	1.44	1.06807940 -8
	0.45	1.05604665 -9	0.95	1.06222861 -8	1.45	1.06819678 -7
	0.46	1.05617251 -10	0.96	1.06235001 -9	1.46	1.06831409 -9
	0.47	1.05629827 -9	0.97	1.06247132 -8	1.47	1.06843131 -7
	0.48	1.05642394 -9	0.98	1.06259255 -9	1.48	1.06854846 -8
	0.49	1.05654952 -9	0.99	1.06271369 -8	1.49	1.06866553 -8
	0.50	1.05667501 -10	1.00	1.06283475 -9	1.50	1.06878252 -8

LOG(G) FOR S=1.5

P	I=24	P	I=24
1.50	1.06878252 -8	2.00	1.07453511 -6
1.51	1.06889943 -7	2.01	1.07464828 -8
1.52	1.06901627 -9	2.02	1.07476137 -7
1.53	1.06913302 -7	2.03	1.07487439 -7
1.54	1.06924970 -8	2.04	1.07498734 -8
1.55	1.06936630 -7	2.05	1.07510021 -6
1.56	1.06948283 -8	2.06	1.07521302 -8
1.57	1.06959928 -8	2.07	1.07532575 -6
1.58	1.06971565 -8	2.08	1.07543842 -8
1.59	1.06983194 -7	2.09	1.07555101 -7
1.60	1.06994816 -8	2.10	1.07566353 -8
1.61	1.07006430 -8	2.11	1.07577597 -6
1.62	1.07018036 -8	2.12	1.07588835 -7
1.63	1.07029634 -7	2.13	1.07600066 -8
1.64	1.07041225 -7	2.14	1.07611289 -6
1.65	1.07052809 -8	2.15	1.07622506 -8
1.66	1.07064385 -8	2.16	1.07633715 -6
1.67	1.07075953 -8	2.17	1.07644918 -8
1.68	1.07087513 -7	2.18	1.07656113 -7
1.69	1.07099066 -7	2.19	1.07667301 -6
1.70	1.07110612 -9	2.20	1.07678483 -8
1.71	1.07122149 -6	2.21	1.07689657 -7
1.72	1.07133680 -8	2.22	1.07700824 -6
1.73	1.07145203 -8	2.23	1.07711985 -8
1.74	1.07156718 -7	2.24	1.07723138 -6
1.75	1.07168226 -8	2.25	1.07734285 -8
1.76	1.07179726 -8	2.26	1.07745424 -6
1.77	1.07191218 -6	2.27	1.07756557 -8
1.78	1.07202704 -8	2.28	1.07767682 -6
1.79	1.07214182 -8	2.29	1.07778801 -8
1.80	1.07225652 -7	2.30	1.07789912 -6
1.81	1.07237115 -8	2.31	1.07801017 -7
1.82	1.07248570 -7	2.32	1.07812115 -7
1.83	1.07260018 -7	2.33	1.07823206 -7
1.84	1.07271459 -8	2.34	1.07834290 -6
1.85	1.07282892 -7	2.35	1.07845368 -8
1.86	1.07294318 -7	2.36	1.07856438 -6
1.87	1.07305737 -8	2.37	1.07867502 -7
1.88	1.07317148 -7	2.38	1.07878559 -8
1.89	1.07328552 -8	2.39	1.07889608 -5
1.90	1.07339948 -7	2.40	1.07900652 -8
1.91	1.07351337 -7	2.41	1.07911688 -7
1.92	1.07362719 -8	2.42	1.07922717 -6
1.93	1.07374093 -6	2.43	1.07933740 -7
1.94	1.07385461 -9	2.44	1.07944756 -7
1.95	1.07396820 -6	2.45	1.07955765 -6
1.96	1.07408173 -7	2.46	1.07966768 -8
1.97	1.07419519 -8	2.47	1.07977763 -6
1.98	1.07430857 -7	2.48	1.07988752 -6
1.99	1.07442188 -8	2.49	1.07999735 -8
2.00	1.07453511 -6	2.50	1.08010710 0

APPENDIX B

**Differences between Values of $\log G_s^{(i)}$
Tabulated by Brown and Brouwer
and the Values Computed for Comparison**



G-214

		S=1.5											S=0.5																																							
		I=0											I=1																																							
P	I	0	1	2	3	4	5	6	7	8	9	10	11	0	1	2	3	4	5	6	7	8	9	10	11																											
0.01	0.04	-0.05	-0.06	-0.07	-0.08	-0.09	-0.10	-0.11	-0.12	-0.13	-0.14	-0.15	-0.16	-0.17	-0.18	-0.19	-0.20	-0.21	-0.22	-0.23	-0.24	-0.25	-0.26	-0.27	-0.28	-0.29	-0.30	-0.31	-0.32	-0.33	-0.34	-0.35	-0.36	-0.37	-0.38	-0.39	-0.40	-0.41	-0.42	-0.43	-0.44	-0.45	-0.46	-0.47	-0.48	-0.49	0.50					
0.00	0.04	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50

P	I = 0	S=0.5											S=1.5											
		1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	
1.00	-1.02	-1.00	-1.14	-1.12	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11		
1.01	-1.03	-1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	
																		1.26	1.27	1.28	1.29	1.30	1.31	
																		1.32	1.33	1.34	1.35	1.36	1.37	
																		1.38	1.39	1.40	1.41	1.42	1.43	
																		1.44	1.45	1.46	1.47	1.48	1.49	
																		1.50	0	0	-1	1	0	1

P		S=0.5											S=1.5															
		I=0	I=1	I=2	I=3	I=4	I=5	I=6	I=7	I=8	I=9	I=10	I=11	I=0	I=1	I=2	I=3	I=4	I=5	I=6	I=7	I=8	I=9	I=10	I=11			
1.50	1.52	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78			
1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78			
1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.82			
1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84			
1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87			
1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91		
1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94		
1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	
1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99	1.99	2.00	

G-214

		S=1.5											S=0.5													
		I= 0					I= 1					I= 2					I= 3					I= 4				
		0	1	2	3	4	5	6	7	8	9	10	11	0	1	2	3	4	5	6	7	8	9	10	11	
P	2.00 2.02 2.03 2.04	2.05 2.07 2.08 2.09	2.10 2.12 2.13 2.14	2.15 2.17 2.18 2.19	2.20 2.22 2.22 2.24	2.25 2.26 2.27 2.28	2.30 2.32 2.33 2.34	2.35 2.36 2.37 2.38	2.40 2.42 2.43 2.44	2.45 2.46 2.47 2.48	2.49 2.49	2.50														
I = 0	-1000-1	00100	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
I = 1	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
I = 2	00000	01011	01100	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	
I = 3	00000	01011	01100	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	
I = 4	00000	01011	01100	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	01111	

